FOR·THE·INCREASE·
AND·DIFFVSION·OF·
KNOWLEDGE·AMONG·MEN·
PER
ORBEM
·SMITHSONIAN·
INSTITVTION·
·WASHINGTON·1846·

Leo. Gill
June 30, 1902

SMITHSONIAN INSTITUTION.

UNITED STATES NATIONAL MUSEUM.

BULLETIN

OF THE

UNITED STATES NATIONAL MUSEUM.

No. 51.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1902.

ADVERTISEMENT.

This work (Bulletin No. 51) is one of a series of papers intended to illustrate the collections belonging to or placed under the charge of the Smithsonian Institution and deposited in the United States National Museum.

The publications of the National Museum consist of two series—the *Bulletin* and the *Proceedings*.

The *Bulletin*, publication of which was commenced in 1875, is a series of elaborate papers issued separately and based for the most part upon collections in the National Museum. They are monographic in scope and are devoted principally to the discussion of large zoological groups, bibliographies of eminent naturalists, reports of expeditions, etc. The bulletins, issued only as volumes with one exception, are of octavo size, although a quarto form, known as the Special Bulletin, has been adopted in a few instances in which a larger page was deemed indispensable.

The *Proceedings* (octavo), the first volume of which was issued in 1878, are intended primarily as a medium of publication for newly acquired facts in biology, anthropology, and geology, descriptions of new forms of animals and plants, discussions of nomenclature, etc. A volume of about 1,000 pages is issued annually for distribution to libraries, while a limited edition of each paper in the volume is printed and distributed in pamphlet form in advance.

In addition, there are printed each year in the second volume of the Smithsonian Report (known as the Report of the National Museum) papers, chiefly of an ethnological character, describing collections in the National Museum.

Papers intended for publication by the National Museum are usually referred to an advisory committee, composed as follows: Frederick W. True (chairman), William H. Holmes, George P. Merrill, James E. Benedict, Otis T. Mason, Leonhard Stejneger, Lester F. Ward, and Marcus Benjamin (editor).

S. P. Langley,
Secretary of the Smithsonian Institution.

Washington, U. S. A., *April 4, 1902.*

A LIST

OF

THE PUBLICATIONS

OF THE

UNITED STATES NATIONAL MUSEUM

(1875-1900)

INCLUDING THE ANNUAL REPORTS, PROCEEDINGS, BULLETINS, SPECIAL BULLETINS, AND CIRCULARS,

WITH INDEX TO TITLES.

BY

RANDOLPH I. GEARE,
Chief, Division of Correspondence and Documents.

WASHINGTON:
GOVERNMENT PRINTING OFFICE.
1902.

PREFACE.

The purpose of this bulletin is to present a list, with index to titles, of the publications of the U. S. National Museum, which consist of an annual Report, an annual volume of Proceedings, Bulletins, Special Bulletins, and Circulars.

The Report constitutes the second volume of the Smithsonian Report, and the first one thus issued is for the year 1884. A certain number of these volumes is assigned to the Museum for distribution to libraries, to correspondents, and to contributors to the collections, while a considerable part of the edition is distributed by members of Congress. The special papers in these volumes, for the most part describing ethnological collections in the National Museum, are furnished free to those interested.

The series of Proceedings of the National Museum began in 1878, and 23 volumes, containing 1,240 separate papers, have been published. These papers, which are technical, describe, or are based wholly or in part upon, material in the Museum. The volumes are sent only to libraries, while the separate papers are furnished without charge to specialists and others engaged in scientific work.

The first number of the Bulletin was issued in 1875. Of the latest in the series, No. 50 (The Birds of North and Middle America), only the first volume, relating to the Fringillidæ, has been issued. The bulletins are intended principally for libraries, but are also given to known specialists working on the groups to which they relate.

Special Bulletins, in quarto, have been issued at irregular intervals, but this form has been used only where a size larger than octavo was deemed especially desirable. The last one published (No. IV) is the first volume of a monograph of the American Hydroids, and relates to the group Plumularidæ.

The primary object of the issuance of the series of Circulars was to bring to immediate notice urgent wants of the Museum, or to promulgate special information with the least possible delay. The first circular was published in 1881, and at the time when the present list was sent to the Printing Office this series contained fifty numbers.

None of the above-mentioned publications are sold by the Museum, but when the Museum can not supply them, persons desiring to purchase are advised to write to the Superintendent of Documents, Union Building, Washington, D. C.

Occasionally the Museum exchanges its publications for desirable specimens.

TABLE OF CONTENTS.

Page.

I. Annual reports of the U. S. National Museum (1881–1900), octavo. Titles of the volumes and general contents 1

II. Numbered series of 122 papers and other important articles in the Annual Reports (1884–1900) 13

III. Proceedings of the U. S. National Museum, Vols. I–XXIII (1878–1901), octavo, comprising papers 1–1240 23

IV. Bulletins of the U. S. National Museum (1875–1901), octavo, Nos. 1–50 117

V. Special bulletins of the U. S. National Museum (1892–1900), quarto, Nos. I–IV 125

VI. Circulars of the U. S. National Museum (1881–1901), Nos. 1–50 127

VII. Index 131

A LIST OF THE PUBLICATIONS OF THE U. S. NATIONAL MUSEUM.

I.—REPORTS.

1881-1900.

510— | Report | of the | Assistant Director | of the | U. S. National Museum, | G. Brown Goode, | for the year 1881. | —— | From the Smithsonian Report for 1881. | —— | Washington: | Government Printing Office. | 1883.

8vo., pp. 1–79.

Report of Assistant Director ..... pp. 1–30.
List of officers ..... p. 31.
Bibliography ..... pp. 31–50.
List of contributors ..... pp. 51–79.

This was the first report on the operations of the National Museum printed under a separate cover. The reports of the Museum for 1881, 1882, and 1883, were first printed in the reports of the Institution for those years, and were afterwards issued in pamphlet form.

The Museum Report for 1884 was the first one to occupy a separate volume of the Smithsonian Report, and to be accompanied by papers based upon the collections.

524— | Report | of the | Assistant Director | of the | U. S. National Museum, | G. Brown Goode, | for the year 1882. | —— | From the Smithsonian Report, 1882. | —— | Washington: | Government Printing Office. | 1883.

8vo., pp. 1–145.

Report of Assistant Director ..... pp. 1–48.
List of officers ..... p. 49.
Bibliography ..... pp. 49–76.
Accessions ..... pp. 77–113.
List of contributors ..... pp. 113–145.

587— | Report | of the | Assistant Director | and of | the Curators | of the | U. S. National Museum | for | the year 1883. | ——— | From the Smithsonian Report for 1883. | ——— | Washington: | Government Printing Office. | 1885.

8vo., pp. 1–200.

Report of the Assistant Director ..... pp. 1–30.
Reports of curators ..... pp. 30–114.
Materia Medica. By J. M. Flint. pp. 30–35.
Foods and Textile Industries. By Romyn Hitchcock. pp. 36–38.
Antiquities. By Charles Rau. pp. 38–47.
Mammals. By Frederick W. True. pp. 48–60.
Birds. By Robert Ridgway. pp. 60–65.

Reptiles. By H. C. Yarrow. pp. 65–68.
Fishes. By Tarleton H. Bean. pp. 68–79.
Insects. By C. V. Riley. pp. 79–84.
Mollusks. By Wm. H. Dall. pp. 84–90.
Marine Invertebrates. By Richard Rathbun. pp. 90–100.
Fossil Invertebrates (Mesozoic and Cenozoic). By C. A. White. pp. 100–101.
Fossil Invertebrates (Paleozoic). By Chas. D. Walcott. pp. 101–103.
Fossil Plants. By Lester F. Ward. p. 103.
Lithology and Physical Geology. By George P. Merrill. pp. 103–106.
Minerals. By F. W. Clarke. pp. 106–108.
Metallurgy and Economic Geology. By Fred P. Dewey. pp. 108–111.
List of officers ..... p. 115.
Bibliography ..... pp. 116–161.
List of contributors ..... pp. 162–200.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the year 1884. | ——— | Part II. | ——— | Washington: | Government Printing Office. | 1885.

8vo., pp. ix, 1–458, 105 pls.

Beginning with this year and continuing until 1892, the reports consist of Part I, Report of the Assistant Director [after 1885 this title was changed to Assistant Secretary]; Part II, Reports of the Curators and Acting Curators; Part III, Papers based on collections in the National Museum; Part IV, Bibliography; Part V, List of accessions to the Museum.

Report of Assistant Director ..... pp. 1–72.
Reports of curators ..... pp. 75–276.
Materia Medica. By H. G. Beyer. pp. 75–77.
Textile Industries. By Romyn Hitchcock. pp. 79–84.
Naval Architecture. By Joseph W. Collins. pp. 85–106.
Foods. By Romyn Hitchcock. pp. 107–108.
Ethnology. By Otis T. Mason. pp. 109–120.
American Aboriginal Pottery. By William H. Holmes. pp. 121–122.
Antiquities. By Charles Rau. pp. 123–127.
Mammals. By Frederick W. True. pp. 129–142.
Birds. By Robert Ridgway. pp. 143–155.
Herpetology. By H. C. Yarrow. pp. 157–160.
Fishes. By Tarleton H. Bean. pp. 161–178.
Mollusks. By William H. Dall. pp. 179–184.
Insects. By C. V. Riley. pp. 185–188.
Marine Invertebrates. By Richard Rathbun. pp. 189–202.
Invertebrate Fossils (Paleozoic). By C. D. Walcott. pp. 203–214.
Invertebrate Fossils (Mesozoic and Cenozoic). By C. A. White. pp. 215–217.
Fossil Plants. By Lester F. Ward. pp. 219–220.
Minerals. By F. W. Clarke. pp. 221–225.
Lithology and Physical Geology. By George P. Merrill. pp. 227–238.
Metallurgy and Economic Geology. By Frederick P. Dewey. pp. 239–276.
Papers illustrating the collections ..... pp. 277–335.
Bibliography ..... pp. 337–381.
Accessions ..... pp. 383–428.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | to July, 1885.[1] | ——— | Part II. | ——— | Washington: | Government Printing Office. | 1886.

8vo., pp. xi, 1–264; vii, 1–939, 144 pls.

Report of Assistant Director ..... pp. 1–54.
Reports of curators ..... pp. 55–147.
Materia Medica. By H. G. Beyer. pp. 57–58.
Textile Industries. By Romyn Hitchcock. pp. 59–60.
Foods. By Romyn Hitchcock. p. 61.
Enthnology. By Otis T. Mason. pp. 63–67.
American Prehistoric Pottery. By W. H. Holmes. p. 69.
Antiquities. By Charles Rau. pp. 71–78.
Mammals. By Frederick W. True. pp. 79–84.
Birds. By Robert Ridgway. pp. 85–91.
Reptiles and Batrachians. By H. C. Yarrow. pp. 93–94.
Fishes. By Tarleton H. Bean. pp. 95–98.
Comparative Anatomy. By Frederick W. True. pp. 99–102.
Mollusks. By William Healey Dall. pp. 103–111.
Insects. By C. V. Riley. pp. 113–116.
Marine Invertebrates. By Richard Rathbun. pp. 117–127.
Invertebrate Fossils (Paleozoic). By C. D. Walcott. pp. 129–132.
Invertebrate Fossils (Meso-Cenozoic). By Charles A. White. p. 133.
Plants. By Lester F. Ward. pp. 135–136.
Minerals. By F. W. Clarke. pp. 137–138.
Lithology and Physical Geology. By George P. Merrill. pp. 139–142.
Metallurgy and Economic Geology. By F. P. Dewey. pp. 143–147.
Bibliography ..... pp. 149–174.
List of accessions ..... pp. 175–243.
Paper on the George Catlin Indian Gallery ..... pp. 1–939.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1886, | —— | Part II. | —— | Washington: | Government Printing Office. | 1889.

8vo., pp. xi, 1–842, 16 pls., 23 figs.

Report of Assistant Secretary ..... pp. 1–83.
Reports of curators ..... pp. 85–252.
Ethnology. By Otis T. Mason. pp. 87–96.
American Aboriginal Pottery. By W. H. Holmes. pp. 97–100.
Archæology. By Charles Rau. pp. 101–112; 4 pls., 20 figs.
Foods and Textiles. By Romyn Hitchcock. pp. 113–118.
Steam Transportation. By J. Elfreth Watkins. pp. 119–141; 5 pls., 9 figs.
Materia Medica. By H. G. Beyer. pp. 143–145.
Mammals. By Frederick W. True. pp. 147–152.
Birds. By Robert Ridgway. pp. 153–162.
Birds' Eggs. By Charles Bendire. pp. 163–164.
Reptiles and Batrachians. By H. C. Yarrow. pp. 165–166.
Fishes. By Tarleton H. Bean. pp. 167–172.
Mollusks (including Cenozoic Fossils). By Wm. H. Dall. pp. 173–179.
Insects. By C. V. Riley. pp. 181–197; 1 pl., 5 figs.

[1] It having been decided to issue future reports by the fiscal year instead of by the calendar year, this volume covers only the first six months of the year 1885.

Marine Invertebrates. By Richard Rathbun. pp. 199–207.
Comparative Anatomy. By Frederick W. True. pp. 209–213.
Invertebrate Fossils. By C. D. Walcott. pp. 215–227.
Invertebrate Fossils (Mesozoic). By C. A. White. pp. 229–230.
Fossil Plants. By Lester F. Ward. p. 231.
Recent Plants. By Lester F. Ward. pp. 233–235.
Minerals. By F. W. Clarke. pp. 237–238.
Lithology and Physical Geology. By George P. Merrill. pp. 239–244.
Metallurgy and Economic Geology. By Fred. P. Dewey. pp. 245–252.
Papers illustrating the collections ..... pp. 253–670.
Bibliography ..... pp. 671–699.
List of accessions ..... pp. 701–793.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1887. | —— | Part II. | ——— | Washington: | Government Printing Office. | 1889.

8vo., pp. xviii, 1–771, 32 pls., 125 figs.

Report of Assistant Secretary ..... pp. 1–62.
Reports of curators ..... pp. 63–558.
Ethnology. By Otis T. Mason. pp. 65–75.
American Aboriginal Pottery. By W. H. Holmes. pp. 77–78.
Transportation. By J. Elfreth Watkins. pp. 79–81; 1 pl., 2 figs.
Archæology. By Charles Rau. pp. 83–85.
Mammals. By Frederick W. True. pp. 87–94.
Birds. By Robert Ridgway. pp. 95–100.
Birds' Eggs. By Charles E. Bendire. pp. 101–102.
Reptiles and Batrachians. By H. C. Yarrow. pp. 103–104.
Fishes. By Tarleton H. Bean. pp. 105–110.
Mollusks (including Cenozoic Invertebrate Fossils). By W. H. Dall. pp. 111–115.
Insects. By C. V. Riley. pp. 117–123.
Marine Invertebrates. By Richard Rathbun. pp. 125–135.
Comparative Anatomy. By Frederick W. True. pp. 137–138.
Invertebrate Fossils (Paleozoic). By C. D. Walcott. pp. 139–141.
Invertebrate Fossils (Mesozoic). By C. A. White. p. 143.
Fossil Plants. By Lester F. Ward. pp. 145–146.
Recent Plants. By Lester F. Ward. pp. 147–148.
Minerals. By F. W. Clarke. pp. 149–150.
Lithology and Physical Geology. By George P. Merrill. pp. 151–153.
Metallurgy and Economic Geology. By F. P. Dewey. pp. 155–158.
Papers illustrating the collections ..... pp. 159–558.
Bibliography ..... pp. 559–594.
List of accessions ..... pp. 595–703.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1888. | —— | Report of the U. S. National Museum. | —— | Washington: | Government Printing Office. | 1890.

8vo., pp. xxii, 1–876, 108 pls., 2 charts, 174 figs., 1 diagrams, 1 map.

Report of Assistant Secretary ..... pp. 1–84.

Reports of curators..... pp. 85–222.
Ethnology. By Otis T. Mason. pp. 87–92.
Oriental Antiquities. By Cyrus Adler. pp. 93–104.
American Aboriginal Pottery. By W. H. Holmes. pp. 105.
Transportation and Engineering. By J. Elfreth Watkins. pp. 107–111.
Materia Medica. By James M. Flint. pp. 113–114.
Historical Relics, Coins, Medals, etc. By A. Howard Clark. pp. 115–116.
Graphic Arts. By S. R. Koehler. pp. 117–122.
Prehistoric Anthropology. By Thomas Wilson. pp. 123–138.
Mammals. By Frederick W. True. pp. 139–143.
Birds. By Robert Ridgway. pp. 145–150.
Birds' Eggs. By Charles E. Bendire. pp. 151–152.
Reptiles and Batrachians. By H. C. Yarrow. pp. 153–154.
Fishes. By Tarleton H. Bean. pp. 155–158.
Mollusks (including Tertiary Fossils). By W. H. Dall. pp. 159–164.
Insects. By C. V. Riley. pp. 165–171.
Marine Invertebrates. By Richard Rathbun. pp. 173–180.
Comparative Anatomy. By Frederick W. True. pp. 181–182.
Invertebrate Fossils. By C. D. Walcott. pp. 183–185.
Invertebrate Fossils (Mesozoic). By C. A. White. pp. 187–188.
Fossil Plants. By Lester F. Ward. pp. 189–190.
Recent Plants. By Lester F. Ward. pp. 191–193.
Minerals. By F. W. Clarke. pp. 195–197.
Lithology and Physical Geology. By George P. Merrill. pp. 199–208.
Metallurgy and Economic Geology. By F. P. Dewey. pp. 209–211.
Living Animals. By W. T. Hornaday. pp. 213–222.
Papers illustrating the collections ..... pp. 223–702.
Bibliography ..... pp. 703–734.
List of accessions ..... pp. 735–789.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1889. | —— | Report | of the | National Museum. | —— | Washington: | Government Printing Office. | 1891.

pp. xvii, 1–883, Appendix E, pp. 1–50; 107 pls., 137 figs., 7 maps.

Report of Assistant Secretary ..... pp. 1–277.
Reports of curators..... pp. 279–423.
Ethnology. By Otis T. Mason. pp. 281–288.
Oriental Antiquities. By Cyrus Adler. pp. 289–292.
Transportation and Engineering. By J. Elfreth Watkins. pp. 293–299.
Graphic Arts. By S. R. Koehler. pp. 301–313.
Prehistoric Anthropology. By Thomas Wilson. pp. 317–339; 6 pls.
American Aboriginal Pottery. By W. H. Holmes. p. 341.
Forestry. By B. E. Fernow. pp. 343–347.
Mammals. By Frederick W. True. pp. 349–355.
Birds. By Robert Ridgway. pp. 357–361.
Birds' Eggs. By Charles E. Bendire. pp. 363–364.
Reptiles. By Leonhard Stejneger. pp. 365–367.
Fishes. By Tarleton H. Bean. pp. 369–370.
Mollusks. By Wm. H. Dall. pp. 371–375.
Insects. By C. V. Riley. pp. 377–380.
Marine Invertebrates. By Richard Rathbun. pp. 381–385.

Comparative Anatomy. By Frederick W. True. pp. 387–390.
Paleozoic Fossils. By C. D. Walcott. pp. 391–396.
Mesozoic Fossils. By C. A. White. p. 397.
Botany. By George Vasey. p. 399.
Minerals. By F. W. Clarke. pp. 401–403.
Lithology and Physical Geology. By George P. Merrill. pp. 405–411.
Metallurgy. By F. P. Dewey. pp. 413–415.
Living Animals. By W. T. Hornaday. pp. 417–423.
Papers illustrating the collections.... pp. 425–735 + Appendix E, pp. 1–50.
Bibliography..... pp. 737–775.
List of accessions ..... pp. 777–820.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution. | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1890. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1891.

pp. xviii, 1–811, 163 pls., 99 figs.

Report of Assistant Secretary ..... pp. 1–116.
Reports of curators..... pp. 117–249.
Ethnology. By Otis T. Mason. pp. 119–136.
Oriental Antiquities. By Cyrus Adler. pp. 137–140.
Historical Collections. By A. Howard Clark. pp. 141–145.
Graphic Arts. By S. R. Koehler. pp. 147–157.
Transportation and Engineering. By J. Elfreth Watkins. pp. 159–162.
Forestry. By B. E. Fernow. pp. 163–164.
Foods and Textiles. By Romyn Hitchcock. pp. 165–174.
Materia Medica. By James M. Flint. pp. 175–177.
Prehistoric Anthropology. By Thomas Wilson. pp. 179–187
Mammals. By Frederick W. True. pp. 189–193.
Birds. By Robert Ridgway. pp. 195–198.
Birds' Eggs. By Charles E. Bendire. pp. 199–200.
Reptiles and Batrachians. By Leonhard Stejneger. pp. 201–203.
Fishes. By Tarleton H. Bean. pp. 205–209.
Mollusks. By Wm. H. Dall. pp. 211–217.
Insects. By C. V. Riley. pp. 219–221.
Marine Invertebrates. By Richard Rathbun. pp. 223–229.
Comparative Anatomy. By Frederick W. True. pp. 231–232.
Paleozoic Fossils. By Charles D. Walcott. pp. 233–234.
Mesozoic Fossils. By C. A. White. pp. 235–236.
Botany. By George Vasey. pp. 237–239.
Minerals. By F. W. Clarke. pp. 241–242.
Geology. By George P. Merrill. pp. 243–249.
Papers illustrating the collections ..... pp. 251–680.
Bibliography ..... pp. 681–716.
List of accessions..... pp. 717–765.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution. | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1891. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1892.

8vo., pp. xvii, 1–869, 84 pls., 151 figs., 3 diagrams.

Report of Assistant Secretary ..... pp. 1–131.

Reports of curators ..... pp. 133–270.
Ethnology. By Otis T. Mason. pp. 135–144.
American Aboriginal Pottery. By William H. Holmes. p. 145.
Oriental Antiquities. By Cyrus Adler. pp. 147–148.
Historical Collections. By A. Howard Clark. pp. 149–157.
Graphic Arts. By S. R. Koehler. pp. 159–161.
Transportation and Engineering. By J. Elfreth Watkins. pp. 163–170.
Forestry. By B. E. Fernow. pp. 171–178.
Materia Medica. By James M. Flint. pp. 179–180.
Physical Apparatus. By W. C. Winlock. p. 181.
Prehistoric Anthropology. By Thomas Wilson. pp. 183–198.
Mammals. By Frederick W. True. pp. 199–205.
Birds. By Robert Ridgway. pp. 207–211.
Birds' Eggs. By Charles E. Bendire. pp. 213–214.
Reptiles and Batrachians. By Leonhard Stejneger. pp. 215–217.
Fishes. By Tarleton H. Bean. pp. 219–221.
Vertebrate Fossils. By Frederic A. Lucas. p. 223.
Mollusks (including Cenozoic Fossils). By William H. Dall. pp. 225–229.
Insects. By C. V. Riley. pp. 231–233.
Marine Invertebrates. By Richard Rathbun. pp. 235–241.
Comparative Anatomy. By Frederic A. Lucas. pp. 243–244.
Paleozoic Invertebrate Fossils. By C. D. Walcott. pp. 245–248.
Mesozoic Fossils. By C. A. White. p. 249.
Botany. By George Vasey. pp. 251–253.
Fossil Plants. By Lester F. Ward. pp 255–257.
Minerals. By F. W. Clarke. pp. 259–260.
Geology. By George P. Merrill. pp. 261–270.
Papers illustrating the collections ..... pp. 271–735.
Bibliography ..... pp. 737–764.
List of accessions ..... pp. 765–814.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1892. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1893.

8vo., pp. xv, 1-620, 103 pls., 5 figs.

Report of Assistant Secretary ..... pp. 1–97.
Reports of curators ..... pp. 99–217.
Ethnology. By Otis T. Mason. pp. 101–107.
American Aboriginal Pottery. By William H. Holmes. p. 109.
Oriental Antiquities. By Cyrus Adler. pp. 111–113.
Historical Collections. By A. Howard Clark. pp. 115–120.
Graphic Arts. By S. R. Koehler. pp. 121–123.
Forestry. By B. E. Fernow. p. 125.
Transportation and Engineering. By J. Elfreth Watkins. pp. 127–132.
Materia Medica. By William S. Dixon. p. 133.
Prehistoric Anthropology. By Thomas Wilson. pp. 135–142.
Mammals. By Frederick W. True. pp. 143–145.
Birds. By Robert Ridgway. pp. 147–152.
Oölogy. By Charles E. Bendire. pp. 153–154.
Reptiles and Batrachians. By Leonhard Stejneger. pp. 155–157.
Fishes. By Tarleton H. Bean. pp. 159–161.
Mollusks (including Cenozoic Fossils). By William H. Dall. pp. 163–167.

Vertebrate Fossils. By O. C. Marsh. pp. 169–170.
Insects. By C. V. Riley. pp. 171–174.
Marine Invertebrates. By Richard Rathbun. pp. 175–179.
Comparative Anatomy. By Frederic A. Lucas. pp. 181–183.
Fossil Plants. By Lester F. Ward. pp. 185–190.
Paleozoic Invertebrate Fossils. By C. D. Walcott. pp. 191–194.
Mesozoic Invertebrate Fossils. By C. A. White. p. 195.
Botany. By George Vasey. pp. 197–200.
Minerals. By F. W. Clarke. pp. 201–203.
Geology. By George P. Merrill. pp. 205–217.
Papers illustrating the collections..... pp. 219–493.
Bibliography ..... pp. 495–526.
List of accessions..... pp. 527–578.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the year ending June 30, 1893. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1895.

8vo., pp. xxi, 1–794, 188 pls., 116 figs.

This and the subsequent reports consist of only two parts: I, Report of the Assistant Secretary, with appendices; II, Papers describing and illustrating collections in the National Museum.

Report of the Assistant Secretary..... pp. 1–192.
Appendices. pp. 193–334.
I. The scientific and administrative staff. pp. 193–194.
II. Finance, property supplies, and accounts. pp. 194–197.
III. Statement of the distribution of specimens during the year ending June 30, 1893. pp. 197–204.
IV. Buildings and labor—police, and public comfort. pp. 204–205.
V. Specimens sent to the Museum for examination and report. pp. 205–218.
VI. List of accessions. pp. 219–284.
VII. Bibliography. pp. 285–313.
VIII. Lectures and meetings of societies. pp. 314–315.
IX. Documents relating to the World's Columbian Exposition. pp. 316–323.
X. Documents in relation to the Columbian Historical Exhibition in Madrid, 1892. pp. 324–334.
Papers illustrating the collections..... pp. 335–780.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1894. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1896.

8vo., pp. xxvi, 1–1030, 57 pls., 851 figs., 1 chart, 1 map.

Report of Assistant Secretary ..... pp. 1–90.
Appendices. pp. 91–233.
I. The scientific and administrative staffs. pp. 91–92.
II. Finance, property, supplies, and accounts. pp. 93–95.
III. Rules governing the watch force in the National Museum. pp. 96–99.
IV. Statement of the distribution of specimens during the year ending June 30, 1894. pp. 100–105.

V. The work of the mechanics and laborers. pp. 106–107.
VI. List of accessions. pp. 108–166.
VII. Specimens sent for examination and report. pp. 167–179.
VIII. Bibliography, with supplementary lists of new genera and species. pp. 180–227.
IX. List of papers in the Annual Report and Proceedings of the National Museum, published in separate form during the year ending June 30, 1894. pp. 228–231.
X. Lectures and meetings of societies. pp. 232–233.
Papers illustrating the collections ..... pp. 235–1011.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1895. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1897.

8vo., pp. xx, 1–1080, 154 pls., 382 figs.

Report of Assistant Secretary ..... pp. 1–102.
Appendices. pp. 103–308.
I. The scientific and administrative staffs. pp. 103–104.
II. List of accessions. pp. 105–162.
III. List of accessions to the Museum library received by gift and exchange during the fiscal year ending June 30, 1895, exclusive of publications retained from the Smithsonian library. pp. 163–205.
IV. Bibliography, with supplementary lists of new genera and species. pp. 207–250.
V. List of papers in the Proceedings of the National Museum, published in separate form during the year ending June 30, 1895. pp. 251–253.
VI. Specimens sent to the Museum for examination and report. pp. 255–266.
VII. Lectures and meetings of societies. pp. 267–270.
VIII. Finance, property, supplies, and accounts. pp. 271–274.
IX. List of duplicate specimens prepared for distribution to educational establishments since 1890. pp. 275–298.
X. Statement of the distribution of specimens during the year ending June 30, 1895. pp. 299–305.
XI. The work of the mechanics and laborers. pp. 307–308.
Papers illustrating the collections ..... pp. 309–1045.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1896. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1898.

8vo., pp. xxiv, 1–1107, 199 pls., 555 figs.

Report of Assistant Secretary ..... pp. 1–106.
Appendices. pp. 107–284.
I. The scientific and administrative staff. pp. 107–108.
II. List of accessions. pp. 109–164.
III. List of accessions to the Museum library by gift and exchange during the fiscal year ending June 30, 1896. pp. 165–194.
IV. Bibliography, with supplementary lists of new genera and species. pp. 195–250.

V. Papers published in separate form during the year ending June 30, 1896. pp. 251–253.
VI. Specimens sent to the Museum for examination and report. pp. 254–267.
VII. Lectures and meetings of societies. pp. 268–270.
VIII. Finance, property, supplies, and accounts. pp. 271–272.
IX. Statement of the distribution of specimens during the year ending June 30, 1896. pp. 273–280.
X. The work of the mechanics and laborers. pp. 281–284.
Papers illustrating the collections ..... pp. 285–1057.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1897. | —— | Report | of the | U. S. National Museum. | Part I. | —— | Washington: | Government Printing Office. | 1899.

8vo., pp. xxvii, 1–1021, 150 pls., 457 figs.

Report of the Assistant Secretary ..... pp. 1–88.
Appendices. pp. 89–245.
I. The scientific and administrative staff. pp. 89–90.
II. List of accessions. pp. 91–151.
III. List of accessions to the Museum library by gift and exchange during the fiscal year ending June 30, 1897. pp. 153–191.
IV. Bibliography. pp. 193–211.
V. Papers published in separate form during the year ending June 30, 1897. pp. 213–215.
VI. Specimens sent to the Museum for examination and report. pp. 217–234.
VII. Lectures and meetings of societies. pp. 235–237.
VIII. Finance, property, supplies, and accounts. p. 238.
IX. Statement of the distribution of specimens during the year ending June 30, 1897. pp. 239–245.
Papers illustrating the collections ..... pp. 247–988.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1897. | —— | Report | of the | U. S. National Museum. | Part II. | —— | Washington: | Government Printing Office. | 1901.

pp. xii, 1–515, 110 pls.

This volume constitutes a memorial to Dr. G. Brown Goode.

CONTENTS.

Memorial meeting, pp. 1–61, and reprints of the following of Dr. Goode's papers:
Museum-history and museums of history. pp. 63–81.
The genesis of the U. S. National Museum. pp. 83–191.
The principles of museum administration. pp. 193–240.
The museums of the future. pp. 241–262.
The origin of the national scientific and educational institutions of the United States. pp. 263–354.
The beginnings of natural history in America. pp. 355–406.
The beginnings of American science. pp. 407–466.
The first national scientific congress (Washington, April, 1844) and its connection with the organization of the American Association. pp. 467–477.
The published writings of George Brown Goode, 1869–1896. By Randolph I. Geare. pp. 479–500.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1898. | —— | Report | of the | National Museum. | —— | Washington: | Government Printing Office. | 1900.

8vo., pp. xviii, 1-1294, 36 pls., 347 figs.

Report of Acting Assistant Secretary (including reports of the head curators) ..... pp. 1-77.

Report on the Department of Anthropology. By William H. Holmes. pp. 19-33.
Report on the Department of Biology. By Frederick W. True. pp. 35-44.
Report on the Department of Geology. By George P. Merrill. pp. 45-50.

Appendices. pp. 79-149.
I. The Museum staff. pp. 79-80.
II. List of accessions. pp. 81-120.
III. Statement of the distribution of specimens during the year ending June 30, 1898. pp. 121-128.
IV. Bibliography. pp. 129-147.
V. Papers published in separate form during the year ending June 30, 1898. pp. 148-149.

Paper on the Crocodilians, Lizards, and Snakes of North America ..... pp. 153-1270.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1899. | —— | Report | of the | U. S. National Museum. | —— | Washington: | Government Printing Office. | 1901.

8vo., pp. xv, 1-598, 62 pls., 74 figs.

Report of Assistant Secretary (including reports of the head curators) ..... pp. 1-70.

Report on the Department of Anthropology. By William H. Holmes. pp. 17-24.
Report on the Department of Biology. By Frederick W. True. pp. 25-35.
Report on the Department of Geology. By George P. Merrill. pp. 37-49.

Appendices. pp. 71-152.
I. The Museum staff. pp. 71-72.
II. List of accessions. pp. 73-115.
III. Statement of the distribution of specimens during the fiscal year ending June 30, 1899. pp. 117-124.
IV. Bibliography. pp. 125-150.
V. Papers published in separate form during the year ending June 30, 1899. pp. 151-152.

Papers illustrating the collections ..... pp. 153-561.

Annual Report | of the | Board of Regents | of the | Smithsonian Institution, | showing | the operations, expenditures, and condition | of the Institution | for the | year ending June 30, 1900. | —— | Report | of the | National Museum. | —— | Washington: | Government Printing Office. | 1902.

8 vo., pp. i-xvii, 1-738, 113 pls., 126 figs.

Report of Assistant Secretary (including reports of the head curators) ..... pp. 1–75.

Report on the Department of Anthropology. By William H. Holmes. pp. 21–29.
Report on the Department of Biology. By Frederick W. True. pp. 31–44.
Report on the Department of Geology. By George P. Merrill. pp. 45–57, 9 pls.

Appendices. pp. 77–152.
I. The Museum staff. pp. 77–78.
II. List of accessions. pp. 79–117.
III. Distribution of specimens. pp. 119–127.
IV. Bibliography. pp. 129–149.
V. Papers published in separate form. pp. 151–152.

Papers illustrating the collections ..... pp. 155–698.

II.—PAPERS PRINTED IN THE ANNUAL REPORTS OF THE U. S. NATIONAL MUSEUM.

(NOS. 1-122.)

1884.

R. 1. Throwing-sticks in the National Museum. By Otis T. Mason.
pp. 279–289, 17 pls.

R. 2. Basket-work of the North American aborigines. By Otis T. Mason.
pp. 291–306, 64 pls.

R. 3. A study of the Eskimo bows in the U. S. National Museum. By John Murdoch.
pp. 307–316, 12 pls.

R. 4. On a Spotted dolphin apparently identical with the *Prodelphinus doris* of Gray. By Frederick W. True.
pp. 317–324, 6 pls.

R. 5. The Florida muskrat (*Neofiber alleni* True). By Frederick W. True.
pp. 325–330, 3 pls.

R. 6. On the West Indian seal (*Monachus tropicalis* Gray). By Frederick W. True and F. A. Lucas.
pp. 331–335, 3 pls.

1885.

R. 7. Sketch of the exhibit made by the Smithsonian Institution at the New Orleans Exposition. (Part of the Report of the Assistant Director.)
pp. 35–37.

R. 8. The George Catlin Indian Gallery in the U. S. National Museum, with memoirs and statistics. By Thomas Donaldson.
pp. vii, 1–939, 144 pls.

1886.

R. 9. Report upon the exhibit made by the Smithsonian Institution at the New Orleans Exposition (including Louisville and Cincinnati). By R. Edward Earll. (Part of the Report of the Assistant Secretary.)
pp. 70–83.

R. 10. The meteorite collection in the U. S. National Museum: A catalogue of meteorites represented November 1, 1886. By F. W. Clarke.
pp. 255–265, 1 plate.

R. 11. Gem collection of the U. S. National Museum. By George F. Kunz.
pp. 267–275.

R. 12. The collection of building and ornamental stones in the U. S. National Museum: A handbook and catalogue. By George P. Merrill.
pp. 277–648, 9 pls., 14 figs.

R. 13. List of specimens of textile fibers and fabrics in the reference series of the section of textile industries of the U. S. National Museum, June 30, 1886. By Romyn Hitchcock.
pp. 649–655.

R. 14. Preparation of microscopical mounts of vegetable textile fibers. By Romyn Hitchcock.
pp. 657–658.

R. 15. How to collect mammal skins for purposes of study and for mounting. By William T. Hornaday.
pp. 659–670, 9 figs.

1887.

R. 16. Cradles of the American aborigines. By Otis T. Mason.
pp. 161–212; 45 figs.

R. 17. Notes on the artificial deformation of children among savages and civilized peoples. By J. H. Porter.
pp. 213–235.

R. 18. The human beast of burden. By Otis T. Mason.
pp. 237–295, 54 figs.

R. 19. Ethno-conchology: A study of primitive money. By Robert E. C. Stearns.
pp. 297–334, 9 pls., 22 figs.

R. 20. A preliminary catalogue of the Eskimo collection in the U. S. National Museum, arranged geographically and by uses. By T. Dix Bolles.
pp. 335–365.

R. 21. The extermination of the American bison, with a sketch of its discovery and life history. By William T. Hornaday.
pp. 367–548, 22 pls.

R. 22. The preservation of museum specimens from insects and the effect of dampness. By Walter Hough.
pp. 549–558, 4 figs.

1888.

R. 23. Report upon the participation of the Smithsonian Institution in the Industrial Exposition at Minneapolis, 1887. By William V. Cox. (Part of the Report of the Assistant Secretary.)
pp. 82–84.

R. 24. The coast Indians of southern Alaska and northern British Columbia. By Albert P. Niblack, U. S. N.
pp. 225–386, 70 pls., 48 figs., 2 charts.

R. 25. A catalogue of the Hippisley collection of Chinese porcelains; with a sketch of the history of ceramic art in China. By Alfred E. Hippisley.
pp. 387–491.

R. 26. The expedition to Funk Island, with observations upon the history and anatomy of the Great Auk. By Frederic A. Lucas.
pp. 493–529, 3 pls., 4 diagrams.

R. 27. Fire-making apparatus in the U. S. National Museum. By Walter Hough.
pp. 531–587, 6 pls., 49 figs.

R. 28. The collection of Korean mortuary pottery in the U. S. National Museum. By Pierre Louis Jouy.
pp. 589–596, 5 pls., 1 map.

R. 29. A study of prehistoric anthropology: Handbook for beginners. By Thomas Wilson.
pp. 597–671, 20 pls., 43 figs.

R. 30. Ancient Indian matting, from Petit Anse Island, Louisiana. By Thomas Wilson.
pp. 673–675, 1 plate.

R. 31. Results of an inquiry as to the existence of man in North America during the paleolithic period of the Stone Age. By Thomas Wilson.
pp. 677–702, 14 figs.

1889.

R. 32. Museum catalogues. By Randolph I. Geare. (Part of the Report of the Assistant Secretary.)
pp. 8–21.

R. 33. Report upon the participation of the Smithsonian Institution and the National Museum in the expositions held at Cincinnati and Mariettta in 1888. (Part of the Report of the Assistant Secretary.)
pp. 149–186, 4 pls.

This report consists of a letter addressed to the Secretary of the Smithsonian Institution and inclosing Appendix A: Report upon the exhibit of the Smithsonian Institution, including the U. S. National Museum, at the Centennial Exposition of the Ohio Valley and Central States, held at Cincinnati, Ohio, in 1888. By R. Edward Earll. Appendix B: Report upon the exhibit of the Smithsonian Institution, including the U. S. National Museum, at the Centennial Exposition, Marietta, Ohio, July 16 to 21, 1888. By William V. Cox.

R. 34. Biographical notice of James Stevenson (Appendix C). (Part of the Report of the Assistant Secretary.)
pp. 187–190.

R. 35. Lists of institutions and foreign and domestic libraries to which it is desired to send future publications of the National Museum (Appendix D). (Part of the Report of the Assistant Secretary.)
pp. 191–277.

R. 36. The museums of the future.[1] By G. Brown Goode.
pp. 427–445.

R. 37. Te Pito Te Henua, or Easter Island. By W. J. Thomson, U. S. N.
pp. 447–552, 49 pls., 20 figs.

R. 38. Aboriginal skin-dressing: A study based on material in the U. S. National Museum. By Otis T. Mason.
pp. 553–589, 33 pls.

R. 39. The Puma, or American lion: *Felis concolor* of Linnæus. By Frederick W. True.
pp. 591–608, 1 plate.

R. 40. Animals recently extinct or threatened with extermination, as represented in the collections of the U. S. National Museum. By Frederic A. Lucas.
pp. 609–649, 11 pls., 2 figs., 7 maps.

R. 41. The development of the American rail and track, as illustrated by the collection in the U. S. National Museum. By J. Elfreth Watkins.
pp. 651–708, 116 figs.

R. 42. Explorations in Newfoundland and Labrador in 1887, made in connection with the cruise of the U. S. Fish Commission schooner *Grampus*. By Frederic A. Lucas.
pp. 709–728, 1 plate.

R. 43. On a bronze Buddha in the U. S. National Museum. By Charles De Kay.
pp. 729–735, 1 plate.

R. 44. Preliminary handbook of the Department of Geology in the U. S. National Museum. By George P. Merrill. (Appendix E.)
pp. 1–50.

1890.

R. 45. The Humming birds. By Robert Ridgway.
pp. 253–383, 46 pls., 47 figs.

R. 46. White-line engraving or relief-printing in the fifteenth and sixteenth centuries. By S. R. Koehler.
pp. 385–394, 4 pls., 3 figs.

R. 47. The methods of fire-making. By Walter Hough.
pp. 395–409, 1 pl., 13 figs.

R. 48. Ulu, or Woman's knife, of the Eskimo. By Otis T. Mason
pp. 411–416, 21 pls.

R. 49. The ancient Pit-dwellers of Yezo. By Romyn Hitchcock.
pp. 417–427, 8 pls., 4 figs.

---

[1] A lecture delivered before the Brooklyn Institute, February 28, 1889.

R. 50. The Ainos of Yezo, Japan. By Romyn Hitchcock.
pp. 429–502, 37 pls., 21 figs.

R. 51. Handbook for the Department of Geology in the U. S. National Museum. Part I. Geognosy. The materials of the earth's crust. By George P. Merrill.
pp. 503–591, 12 pls., 10 figs.

R. 52. The Catlin collection of Indian paintings.[1] By Washington Matthews, U. S. A.
pp. 593–610, 21 pls.

R. 53. The log of the *Savannah*. By J. Elfreth Watkins.
pp. 611–639, 6 pls.

R. 54. Anthropology at the Paris Exposition in 1889. By Thomas Wilson.
pp. 641–680, 7 pls., 1 fig.

1891.

R. 55. The genesis of the National Museum. By G. Brown Goode.
pp. 273–380.

R. 56. Ethnological collections in the U. S. National Museum from Kilima-Njaro, East Africa. By W. L. Abbott.
pp. 381–428, 24 figs.

R. 57. The Bernadou, Allen, and Jouy Korean collections in the U. S. National Museum. By Walter Hough.
pp. 429–488, 31 pls.

R. 58. Shinto, or the mythology of the Japanese. By Romyn Hitchcock.
pp. 489–509.

R. 59. The ancient burial mounds of Japan. By Romyn Hitchcock.
pp. 511–523, 31 pls.

R. 60. Some ancient relics in Japan. By Romyn Hitchcock.
pp. 525–526, 4 pls.

R. 61. Prehistoric naval architecture of the north of Europe. By George H. Boehmer.
pp. 527–647, 17 pls., 126 figs.

R. 62. First draft of a system of classification for the World's Columbian Exposition. By G. Brown Goode.
pp. 649–735.

1892.

R. 63. Japanese wood-cutting and wood-cut printing. By T. Tokuno.
pp. 221–241, 10 pls., 5 figs.

R. 64. The relation of biology to geological investigation. By Charles A. White.
pp. 245–368, 1 plate.

R. 65. Scientific taxidermy for museums. (Based on a study of the United States Government collections.) By R. W. Shufeldt.
pp. 369–436, 84 pls.

---

[1] Reprint of a lecture delivered in the National Museum on April 13, 1889.

R. 66. The shofar—its use and origin. By Cyrus Adler.
pp. 437–450, 4 pls.

R. 67. The Crump burial cave. (Blount County, Alabama.) By Frank Burns.
pp. 451–454, 1 plate.

R. 68. Minute stone implements from India. By Thomas Wilson.
pp. 455–460, 2 pls.

R. 69. Comparative oölogy of North American birds. By R. W. Shufeldt.
pp. 461–493.

1893.

R. 70. Recent advances in museum methods. (Part of the Report of the Assistant Secretary.)
pp. 21–58, 55 pls.

R. 71. Columbian Historical Exposition in Madrid. (Part of the Report of the Assistant Secretary.)
pp. 86–108; also Appendix X, pp. 324–334.

R. 72. The World's Columbian Exposition. (Part of the Report of the Assistant Secretary.)
pp. 108–114, 1 plate; also Appendix IX, pp. 316–321.

R. 73. The poisonous snakes of North America. By Leonhard Stejneger.
pp. 345–487, 19 pls., 70 figs.

R. 74. Chinese games with dice and dominoes. By Stewart Culin.
pp. 489–537, 12 pls., 33 figs.

R. 75. The onyx marbles; their origin, composition, and uses, both ancient and modern. By George P. Merrill.
pp. 539–585, 18 pls.

R. 76. The cowbirds. By Charles Bendire.
pp. 587–624, 3 pls.

R. 77. Primitive American armor. By Walter Hough.
pp. 625–651.

R. 78. The weapons and wings of birds. By Frederic A. Lucas.
pp. 653–663, 1 plate, 8 figs.

R. 79. Notes on the ethnology of Tibet. By William Woodville Rockhill.
pp. 665–747, 52 pls.

R. 80. Two Persepolitan casts in the U. S. National Museum. By Cyrus Adler.
pp. 749–753, 2 pls.

R. 81. Museum collections to illustrate religious history and ceremonials. By Cyrus Adler.
pp. 755–768.

R. 82. If public libraries, why not public museums?[1] By Edward S. Morse.
pp. 769–780.

---

[1] Reprinted from The Atlantic Monthly, July, 1893, pp. 112–119.

1894.

R. 83. Primitive travel and transportation. By Otis Tufton Mason.
pp. 237–593, 25 pls., 260 figs.

R. 84. Mancala, the national game of Africa. By Stewart Culin.
pp. 595–607, 5 pls., 15 figs.

R. 85. The golden patera of Rennes. By Thomas Wilson.
pp. 609–617, 1 plate, 1 fig.

R. 86. The wooden statue of Baron Ii Kamon-no-Kami Naosuké, pioneer diplomat of Japan. (Translation by Mr. H. Satoh of the label accompanying the statue.)
pp. 619–622, 1 plate.

R. 87. A study of the primitive methods of drilling. By J. D. McGuire.
pp. 623–756, 201 figs.

R. 88. The swastika, the earliest known symbol, and its migrations; with observations on the migration of certain industries in prehistoric times. By Thomas Wilson.
pp. 757–1011, 25 pls., 374 figs., 1 map, 1 chart.

1895.

R. 89. The social organization and the secret societies of the Kwakiutl Indians. By Franz Boas.
pp. 311–738, 51 pls., 215 figs.

R. 90. The graphic art of the Eskimos. By Walter James offman.
pp. 739–968, 82 pls., 154 figs.

R. 91. Notes on the geology and natural history of the peninsula of Lower California. By George P. Merrill.
pp. 969–994, 10 pls.

R. 92. The mineralogical collections in the U. S. National Museum. By Wirt Tassin.
pp. 995–1000, 1 plate.

R. 93. The tongues of birds. By Frederic A. Lucas.
pp. 1001–1020, 2 pls., 13 figs.

R. 94. The Ontonagon copper bowlder in the U. S. National Museum. By Charles Moore.
pp. 1021–1030, 2 pls.

R. 95. Taxidermical methods in the Leyden Museum, Holland. By R. W. Shufeldt.
pp. 1031–1037, 6 pls.

R. 96. The antiquity of the red race in America. By Thomas Wilson.
pp. 1039–1045.

1896.

R. 97. An account of the U. S National Museum. By Frederick W. True.
pp. 287–324.

R. 98. Prehistoric art; or, the origin of art as manifested in the works of prehistoric man. By Thomas Wilson.
pp. 325–664, 75 pls., 325 figs.

R. 99. Chess and playing cards: catalogue of games and implements for divination exhibited by the United States National Museum in connection with the Department of Archæology and Paleontology of the University of Pennsylvania at the Cotton States and International Exposition, Atlanta, Georgia, 1895. By Stewart Culin.
pp. 665–942, 50 pls., 226 figs.

R. 100. Biblical antiquities: A description of the exhibit at the Cotton States International Exposition at Atlanta, 1895. By Cyrus Adler and I. M. Casanowicz.
pp. 943–1023, 46 pls.

R. 101. The lamp of the Eskimo. By Walter Hough.
pp. 1025–1057, 24 pls., 4 figs.

1897.

R. 102. Recent foraminifera: A descriptive catalogue of specimens dredged by the U. S. Fish Commission steamer *Albatross*. By James M. Flint, U. S. N.
pp. 249–349, 80 pls.

R. 103. Pipes and smoking customs of the American aborigines, based on material in the U. S. National Museum. By Joseph D. McGuire.
pp. 351–645, 5 pls., 239 figs.

R. 104. Catalogue of the series illustrating the properties of minerals. By Wirt Tassin.
pp. 647–688.

R. 105. Te Pito Te Henua, known as "Rapa Nui;" commonly called Easter Island, South Pacific Ocean. By George H. Cooke, U. S. N.
pp. 689–723.

R. 106. The man's knife among the North American Indians: A study in the collections of the U. S. National Museum. By Otis Tufton Mason.
pp. 725–745, 17 figs.

R. 107. Classification of the mineral collections in the U. S. National Museum. By Wirt Tassin.
pp. 747–810.

R. 108. Arrowpoints, spearheads, and knives of prehistoric times. By Thomas Wilson.
pp. 811–988, 65 pls., 201 figs.

1898.

R. 109. Future development of the National Museum. (Part of the Report of the Acting Assistant Secretary.)
pp. 13–16.

R. 110. The crocodilians, lizards, and snakes of North America. By Edward Drinker Cope.
pp. 153–1270, 36 pls., 347 figs.

1899.

R. 111. Guide to the study of the collections in the section of applied geology: The non-metallic minerals. By George P. Merrill.
pp. 155–483, 30 pls., 13 figs.

R. 112. A primitive frame for weaving narrow fabrics. By Otis Tufton Mason.
pp. 485–510, 9 pls., 19 figs.

R. 113. An early West Virginia pottery. By Walter Hough.
pp. 511–521, 18 pls.

R. 114. Pointed bark canoes of the Kutenai and Amur. By Otis Tufton Mason. (With notes on the Kutenai canoe by Meriden S. Hill.)
pp. 523–537, 5 pls., 6 figs.

R. 115. Descriptive catalogue of a collection of objects of Jewish ceremonial deposited in the U. S. National Museum by Hadji Ephraim Benguiat. By Cyrus Adler and I. M. Casanowicz.
pp. 539–561, 36 pls.

1900.

R. 116. Anthropological studies in California. By W. H. Holmes.
pp. 155–187, 50 pls.

R. 117. Aboriginal American harpoons: A study in ethnic distribution and invention. By Otis T. Mason.
pp. 189–304, frontispiece, 19 pls., 92 figs.

R. 118. A sketch of the history of the ceramic art in China, with a catalogue of the Hippisley collection of Chinese porcelains. By Alfred E. Hippisley.
pp. 305–416, 21 pls.

R. 119. Contributions to the history of musical scales. By Charles K. Wead.
pp. 417–462, 10 pls., 8 figs.

R. 120. A collection of Hopi ceremonial pigments. By Walter Hough.
pp. 463–471.

R. 121. Descriptive catalogue of the collections of gems in the U. S. National Museum. By Wirt Tassin.
pp. 473–670, 9 pls., 26 figs.

R. 122. Descriptive catalogue of the meteorite collection in the U. S. National Museum. By Wirt Tassin.
pp. 671–698, 4 pls.

III.—PROCEEDINGS OF THE U. S. NATIONAL MUSEUM.[1]

[VOLUMES I–XXIII.]

VOLUME I, CONTAINING PAPERS 1–61.

Department of the Interior: | U. S. National Museum. | —— 17 —— | Proceedings | of the | United States National Museum. | Vol. 1. | 1878. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1879.

8vo., pp. iv, 1–520, 8 pls., 7 figs.

P. 1. Descriptions of new forms of mollusks from Alaska contained in the collections of the National Museum. By William H. Dall.
pp. 1–3.

P. 2. Postpliocene fossils in the coast range of California. By William H. Dall.
p. 3.

P. 3. Notes on the American species of the genus *Cybium*. By Felipe Poey.
pp. 3–5.

P. 4. The *Clupea tyrannus* of Latrobe. By G. Brown Goode.
pp. 5–6.

P. 5. The occurrence of *Belone latimanus* in Buzzard's Bay, Massachusetts. By G. Brown Goode.
pp. 6–7.

P. 6. The voices of crustaceans. By G. Brown Goode.
pp. 7–8.

P. 7. On a new humming bird (*Atthis ellioti*) from Guatemala. By Robert Ridgway.
pp. 8–10.

P. 8. Fossil mollusks from later tertiaries of California. By William H. Dall.
pp. 10–16.

P. 9. The manufacture of porpoise oil. By Caleb Cook.
pp. 16–18.

P. 10. The craig flounder of Europe, *Glyptocephalus cynoglossus*, on the coast of North America. By G. Brown Goode and Tarleton H. Bean.
pp. 19–23.

---

[1] Vols. I–X were issued as publications of the Department of the Interior.

P. 11. Note on shells from Costa Rica kitchenmidden, collected by Drs. Flint and Bransford. By William H. Dall.
pp. 23–24.

P. 12. Arsenic acid for protecting anatomical preparations from insects. By J. B. S. Jackson.
p. 24.

P. 13. The oceanic bonito on the coast of the United States. By G. Brown Goode and Tarleton H. Bean.
pp. 24–26.

P. 14. Distribution of Californian tertiary fossils. By William H. Dall.
pp. 26–30.

P. 15. A revision of the American species of the genus *Brevoortia*, with a description of a new species from the Gulf of Mexico. By G. Brown Goode.
pp. 30–42.

P. 16. Description of *Caulolatilus microps*, a new species of fish from the coast of Florida. By G. Brown Goode and Tarleton H. Bean.
pp. 42–45.

P. 17. The occurrence of *Hippocampus antiquorum*, or an allied form, on Saint George's Banks. By G. Brown Goode.
pp. 45–46.

P. 18. Descriptions of new species of shells from California in the collections of the National Museum. By William H. Dall.
pp. 46–47.

P. 19. Catalogue of the birds of Dominica from collections made for the Smithsonian Institution by Frederick A. Ober, together with his notes and observations. By George N. Lawrence.
pp. 48–69.

P. 20. Notes on a collection of fishes from Clackamas River, Oregon. By David S. Jordan.
pp. 69–85.

P. 21. A review of the American species of the genus *Scops*, Savigny. By Robert Ridgway.
pp. 85–117.

P. 22. Notes on the ornithology of southern Texas, being a list of birds observed in the vicinity of Fort Brown, Texas, from February, 1876, to June, 1878. By James C. Merrill.
pp. 118–173, 3 pls.

P. 23. On a serranoid fish, *Epinephelus drummond-hayi*, from the Bermudas and Florida. By G. Brown Goode and Tarleton H. Bean.
pp. 173–175.

P. 24. Descriptions of two new species of fishes, *Lutjanus blackfordii* and *Lutjanus stearnsii*, from the coast of Florida. By G. Brown Goode and Tarleton H. Bean.
pp. 176–181.

P. 25. A note on the Gulf menhaden, *Brevoortia patronus* Goode. By Silas Stearns.
pp. 181–182.

P. 26. A note upon the black grouper, *Epinephelus nigritus* (Holbrook) Gill, of the southern coast. By G. Brown Goode and Tarleton H. Bean.
pp. 182–184.

P. 27. Catalogue of the birds of Saint Vincent, from collections made by Mr. Fred. A. Ober, under the directions of the Smithsonian Institution, with his notes thereon. By George N. Lawrence.
pp. 185–198.

P. 28. Description of a new sparoid fish, *Sargus holbrookii*, from Savannah Bank. By Tarleton H. Bean.
pp. 198–200.

P. 29. Catalogue of casts taken by Clark Mills, esq., of the heads of sixty-four Indian prisoners of various western tribes, and held at Fort Marion, Saint Augustine, Florida, in charge of Capt. R. H. Pratt, U. S. A. By R. H. Pratt.
pp. 201–214.

P. 30. Synopsis of the pediculate fishes of the eastern coast of extratropical North America. By Theodore Gill.
pp. 215–221.

P. 31. Note on the Antennariidæ. By Theodore Gill.
pp. 221–222.

P. 32. On the proper specific name of the common pelagic Antennariid *Pterophryne*. By Theodore Gill.
pp. 223–226.

P. 33. Note on the Ceratiidæ. By Theodore Gill.
pp. 227–231.

P. 34. Note on the Maltheidæ. By Theodore Gill.
pp. 231–232.

P. 35. Catalogue of the birds of Antigua and Barbuda, from collections made for the Smithsonian Institution by Mr. Fred. A. Ober, with his observations. By George N. Lawrence.
pp. 232–242.

P. 36. Note on *Perca flavescens*. By Franz Steindachner.
p. 243.

P. 37. On the destruction of fish in the vicinity of the Tortugas during the months of September and October, 1878. By J. P. Jefferson, Joseph Y. Porter, and Thomas Moore.
pp. 244–246.

P. 38. Descriptions of several new species and geographical races of birds contained in the collection of the U. S. National Museum. By Robert Ridgway.
pp. 247–252.

P. 39. Description of two new species of birds from Costa Rica, and notes on other rare species from that country. By Robert Ridgway.
pp. 252–255.

P. 40. Description of two gadoid fishes, *Phycis chesteri* and *Halloporphyrus viola*, from the deep-sea fauna of the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean.
pp. 256–260.

P. 41. Description of *Argentina syrtensium*, a new deep-sea fish from Sable Island Bank. By G. Brown Goode and Tarleton H. Bean.
pp. 261–263.

P. 42. On the occurrence of the oceanic bonito, *Orcynus pelamys* (Linné) Poey, in Vineyard Sound, Massachusetts. By Vinal N. Edwards.
p. 263.

P. 43. Notes on the western gizzard shad, *Dorosoma cepedianum heterurum* (Raf.) Jordan. By Samuel Wilmot.
pp. 263–264.

P. 44. The occurrence of the Canada porcupine in West Virginia. By G. Brown Goode.
pp. 264–265.

P. 45. Catalogue of the birds of Grenada, from a collection made by Mr. Fred. A. Ober, for the Smithsonian Institution, including others seen by him, but not obtained. By George N. Lawrence.
pp. 265–278.

P. 46. On the breeding habits of the sea-catfish (*Ariopsis milberti ?*). By N. T. Lupton.
pp. 278–279.

P. 47. On the occurrence of *Stichæus punctatus* (Fabr.) Kröyer, at St. Michael's, Alaska. By Tarleton H. Bean.
pp. 279–281.

P. 48. Report on the limpets and chitons of the Alaskan and Arctic regions, with descriptions of genera and species believed to be new. By William H. Dall.
pp. 281–344, 5 pls., 5 figs.

P. 49. On the identity of *Euchalarodus putnami* Gill, with *Pleuronectes glaber* (Storer) Gill, with notes on the habits of the species. By Tarleton H. Bean.
pp. 345–348.

P. 50. The identity of *Rhinonemus caudacuta* (Storer) Gill, with *Gadus cimbrius* Linn. By G. Brown Goode.
pp. 348–349.

P. 51. Catalogue of the birds collected in Martinique by Mr. Fred. A. Ober, for the Smithsonian Institution. By George N. Lawrence.
pp. 349–360.

P. 52. Note on *Platessa ferruginea*, D. H. Storer, and *Platessa rostrata*, H. R. Storer. By G. Brown Goode and Tarleton H. Bean.
pp. 361–362.

P. 53. On the identity of *Brosmius americanus* Gill, with *Brosmius brosme* (Müller) White. By G. Brown Goode and Tarleton H. Bean.
pp. 362–363.

P. 54. On the mortality of fishes in the Gulf of Mexico in 1878. By J. P. Jefferson.
pp. 363–364.

P. 55. Notes on the fishes of Beaufort Harbor, North Carolina. By David S. Jordan and Charles H. Gilbert.
pp. 365–388.

P. 56. A partial list of the birds of central California. [Edited by R. Ridgway.] By L. Belding.
pp. 388–449.

P. 57. Catalogue of a collection of birds obtained in Guadeloupe for the Smithsonian Institution, by Mr. Fred. A. Ober. By George N. Lawrence.
pp. 449–462.

P. 58. On two fishes from the Bermudas mistakenly described as new by Dr. Günther. By G. Brown Goode.
pp. 462–463.

P. 59. Description of a species of *Lycodes* (*L. turneri*) from Alaska, believed to be undescribed. By Tarleton H. Bean.
pp. 463–466.

P. 60. Descriptions of new species and races of American birds, including a synopsis of the genus *Tyrannus* Cuvier. By Robert Ridgway.
pp. 466–486.

P. 61. A general catalogue of the birds noted from the islands of the Lesser Antilles visited by Mr. Fred. A. Ober, with a table showing their distribution and those found in the United States. By George N. Lawrence.
pp. 486–488.

VOLUME II, CONTAINING PAPERS 62–101.

Department of the Interior: | U. S. National Museum. | —— 19 —— | Proceedings | of the | United States National Museum. | Vol. II. | 1879. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1880.

8vo., pp. iv, 1–499, 7 pls., 2 figs.

P. 62. Notes on the nests and eggs of the eight North American species of *Empidonaces*. By T. M. Brewer.
pp. 1–10.

P. 63. A list of European fishes in the collection of the United States National Museum. By Tarleton H. Bean.
pp. 10–44.

P. 64. Description of a species of *Lycodes* (*L. paxillus*), obtained by the United States Fish Commission. By G. Brown Goode and Tarleton H. Bean.
pp. 44–46.

P. 65. Description of a new species of *Liparis* (*L. ranula*), obtained by the United States Fish Commission off Halifax, Nova Scotia. By G. Brown Goode and Tarleton H. Bean.
pp. 46–48.

P. 66. Description of a new species of amber fish (*Seriola stearnsii*), obtained near Pensacola, Florida, by Mr. Silas Stearns. By G. Brown Goode and Tarleton H. Bean.
pp. 48–51.

P. 67. On the birds of Heligoland. By H. Gätke.
pp. 51–55.

P. 68. Description of *Alepocephalus bairdii*, a new species of fish from the deep-sea fauna of the western Atlantic. By G. Brown Goode and Tarleton H. Bean.
pp. 55–57.

P. 69. On the species of *Astroscopus* of the eastern United States. By Tarleton H. Bean.
pp. 57–63.

P. 70. On the occurrence of *Hippoglossus vulgaris* Flem., at Unalashka and Saint Michael's, Alaska. By Tarleton H. Bean.
pp. 63–66.

P. 71. Description of an apparently new species of *Gasterosteus* (*G. atkinsii*) from the Schoodic Lakes, Maine. By Tarleton H. Bean.
pp. 67–69.

P. 72. Review of the Pleuronectidæ of San Francisco. By W. N. Lockington.
pp. 69–108.

P. 73. A preliminary catalogue of the fishes of the Saint John's River and the east coast of Florida, with descriptions of a new genus and three new species. By G. Brown Goode.
pp. 108–121.

P. 74. Catalogue of a collection of fishes sent from Pensacola, Florida, and vicinity, by Mr. Silas Stearns, with description of six new species. By G. Brown Goode and Tarleton H. Bean.
pp. 121–156.

P. 75. Notes on New England Isopoda. By Oscar Harger.
pp. 157–165.

P. 76. Notice of recent additions to the marine invertebrata, of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. (Part I. Annelida, Gephyræa, Nemertina, Nematoda, Polyzoa, Tunicata, Mollusca, Anthozoa, Echinodermata, Porifera.) By A. E. Verrill.
pp. 165–205.

P. 77. Description of a new genus and species of fish, *Lopholatilus chamæleonticeps*, from the south coast of New England. By G. Brown Goode and Tarleton H. Bean.
pp. 205–209.

P. 78. On the occurrence of *Lycodes vahlii* Reinhardt, on La Have and Grand Banks. By G. Brown Goode and Tarleton H. Bean.
pp. 209–210.

P. 79. List of names, age, tribe, etc., of Indian boys and girls at Hampton Normal and Agricultural Institute, Virginia, plaster casts of whose heads were taken by Clark Mills, esq., March, 1879. By R. H. Pratt.
p. 211.

P. 80. Description of a new fish from Alaska (*Anarrhichas leptorus*), with notes upon other species of the genus *Anarrhichas*. By Tarleton H. Bean.
pp. 212–218.

P. 81. Notes on certain typical specimens of American fishes in the British Museum and in the Museum d'Histoire Naturelle at Paris. By David S. Jordan.
pp. 218–226.

P. 82. List of marine invertebrata from the New England coast, distributed by the U. S. Commission of Fish and Fisheries.[1] By Richard Rathbun.
pp. 227–232.

P. 83. Occurrence of *Chelura terebrans*, a crustacean destructive to the timber of submarine structures, on the coast of the United States. By Sidney I. Smith.
pp. 232–235, 2 figs.

P. 84. Description of new species of North American fishes. By David S. Jordan.
pp. 235–241.

P. 85. On the migrations and nesting habits of west-coast birds. By J. G. Cooper.
pp. 241–251.

P. 86. Descriptions of new species of carboniferous invertebrate fossils. By C. A. White.
pp. 252–260, 1 plate.

---

[1] For lists of the specimens contained in Series II, III, IV, see Nos. 230, 231, 371; and in Series V, see Rep. U.S.N.M., 1895, pp. 292–298.

P. 87. A study of the trunk-fishes (Ostraciontidæ), with notes upon the American species of the family. By G. Brown Goode.
pp. 261–283.

P. 88. On the habits of the Rocky Mountain goat. By James C. Merrill.
pp. 283–284.

P. 89. Notes on a collection of fishes from eastern Georgia. By Tarleton H. Bean.
pp. 284–286.

P. 90. Description of a new species of *Amiurus* (*A. ponderosus*), from the Mississippi river. By Tarleton H. Bean.
pp. 286–290.

P. 91. Note on *Endothyra ornata*. By C. A. White.
p. 291.

P. 92. Note on *Criocardium* and *Ethmocardium*. By C. A. White.
pp. 291–292.

P. 93. Descriptions of new cretaceous invertebrate fossils from Kansas and Texas. By C. A. White.
pp. 292–298, 5 pls.

P. 94. Notes on a collection of fishes obtained in the stream of Guanajuato and in Chapala Lake, Mexico, by Prof. A. Dugès. By David S. Jordan.
pp. 298–301.

P. 95. Descriptions of two species of fishes collected by Prof. A. Dugès in central Mexico. By Tarleton H. Bean.
pp. 302–305.

P. 96. Report of experiments upon the animal heat of fishes, made at Provincetown, Massachusetts, during the summer of 1879, in connection with operations of the United States Fish Commission. By J. H. Kidder.
pp. 306–326.

P. 97. Descriptions of new genera and species of fishes from the coast of California. By W. N. Lockington.
pp. 326–332.

P. 98. Catalogue of a collection of fishes obtained in the Gulf of Mexico by Dr. J. W. Velie, with descriptions of seven new species. By G. Brown Goode and Tarleton H. Bean.
pp. 333–345.

P. 99. Notice of a new species of the 'Willemœsia group of crustacea' (Recent Eryontidæ). By Sidney I. Smith.
pp. 345–353, 1 plate.

P. 100. Descriptions of some genera and species of Alaskan fishes. By Tarleton H. Bean.
pp. 353–359.

P. 101. Fourth installment of ornithological bibliography; being a list of faunal publications relating to British birds. By Elliott Coues.
pp. 359–477.

VOLUME III, CONTAINING PAPERS 102–184.

Department of the Interior: | U. S. National Museum. | —— 25 —— | Proceedings | of the | United States National Museum. | Vol. III. | 1880. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1881.

8vo., pp. v, 1–589, 2 pls., 11 figs.

P. 102. Revisions of nomenclature of certain North American birds. By Robert Ridgway.
pp. 1–16.

P. 103. Description of a new species of bird of the family Turdidæ, from the island of Dominica, West Indies. By George N. Lawrence.
pp. 16–17.

P. 104. Notes on a collection of fishes from east Florida, obtained by Dr. J. A. Henshall. By David S. Jordan.
pp. 17–21.

P. 105. Notes on a collection of fishes from Saint John's River, Florida, obtained by Mr. A. H. Curtiss. By David S. Jordan.
p. 22.

P. 106. Notes on a collection of fishes from San Diego, California. By David S. Jordan and Charles H. Gilbert.
pp. 23–34.

P. 107. Description of a new flounder (*Xystreurys liolepis*) from Santa Catalina Island, California. By David S. Jordan and Charles H. Gilbert.
pp. 34–36.

P. 108. Description of a new ray (*Platyrhina triseriata*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 36–38.

P. 109. Description of a new species of "rock cod" (*Sebastichthys serriceps*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 38–40.

P. 110. On the occurrence of *Cephaloscyllium laticeps* (Duméril) Gill, on the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 40–42.

P. 111. On the oil-shark of southern California (*Galeorhinus galeus*). By David S. Jordan and Charles H. Gilbert.
pp. 42–43.

P. 112. The surf-smelt of the northwest coast, and the method of taking them by the Quillehute Indians, west coast of Washington territory. By James G. Swan.
pp. 43–46.

P. 113. Note on the occurrence of *Productus giganteus* in California. By C. A. White.
pp. 46–47.

P. 114. Note on *Acrothele*. By C. A. White.
p. 47.

P. 115. Description of a new cretaceous *Pinna* from New Mexico. By C. A. White.
pp. 47–48.

P. 116. Note on the occurrence of *Stricklandinia salteri* and *S. davidsoni* in Georgia. By C. A. White.
pp. 48–49.

P. 117. Description of a new flounder (*Pleuronichthys verticalis*), from the coast of California, with notes on other species. By David S. Jordan and Charles H. Gilbert.
pp. 49–51.

P. 118. Notes on sharks from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 51–52.

P. 119. On the generic relations of *Platyrhina exasperata*. By David S. Jordan and Charles H. Gilbert.
p. 53.

P. 120. Remarks on the species of the genus *Chirus* found in San Francisco market, including one hitherto undescribed. By W. N. Lockington.
pp. 53–57.

P. 121. Description of a new fish from Alaska (*Uranidea microstoma*). By W. N. Lockington.
pp. 58–59.

P. 122. Description of a new species of Agonidæ (*Brachyopsis verrucosus*), from the coast of California. By W. N. Lockington.
pp. 60–63.

P. 123. Description of a new genus and some new species of California fishes (*Icosteus ænigmaticus* and *Osmerus attenuatus*). By W. N. Lockington.
pp. 63–68.

P. 124. Description of a new hake (*Phycis earllii*), from South Carolina, and a note on the occurrence of *Phycis regius* in North Carolina. By Tarleton H. Bean.
pp. 69–70.

P. 125. Description of a new species of *Sebastichthys* (*Sebastichthys miniatus*), from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert.
pp. 70–73.

P. 126. Description of a new species of "rock fish" (*Sebastichthys carnatus*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 73–75.

P. 127. Check-list of duplicates of North American fishes distributed by the Smithsonian Institution in behalf of the United States National Museum, 1877–1880.[1] By Tarleton H. Bean.
pp. 75–116.

P. 128. The littoral marine fauna of Provincetown, Cape Cod, Massachusetts. By Richard Rathbun.
pp. 116–133.

P. 129. Description of a new species of ray (*Raia stellulata*), from Monterey, California. By David S. Jordan and Charles H. Gilbert.
pp. 133–135.

P. 130. Descriptions of new species of *Xiphister* and *Apodichthys*, from Monterey, California. By David S. Jordan and Charles H. Gilbert.
pp. 135–140.

P. 131. Description of a very large fossil gasteropod from the State of Puebla, Mexico. By C. A. White.
pp. 140–142, 1 plate.

P. 132. Description of two new species of *Sebastichthys* (*Sebastichthys entomelas* and *Sebastichthys rhodochloris*), from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert.
pp. 142–146.

P. 133. On the occurrence of a species of *Cremnobates* at San Diego, California. By Rosa Smith.
pp. 147–149.

P. 134. On some new species of eocene mollusca from the southern United States. By Angelo Heilprin.
pp. 149–152, 1 plate.

P. 135. Description of a new agonoid fish (*Brachyopsis xyosternus*), from Monterey Bay, California. By David S. Jordan and Charles H. Gilbert.
pp. 152–154.

P. 136. Description of a new flounder (*Hippoglossoides exilis*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 154–156.

P. 137. Descriptions of new invertebrate fossils from the mesozoic and cenozoic rocks of Arkansas, Wyoming, Colorado, and Utah. By C. A. White.
pp. 157–162.

P. 138. A catalogue of the birds of North America. By Robert Ridgway.
pp. 163–246.

---

[1] For list of fishes distributed in 1881 see No. 185. The list of a later distribution is printed in the Rep. U. S. Nat. Mus., 1895, pp. 278–280.

P. 139. On the identity of the genus *Leurynnis* Lockington, with *Lycodopsis* Collett. By Theodore Gill.
pp. 247–248.

P. 140. Description of a new chiroid fish (*Myriolepis zonifer*), from Monterey Bay, California. By W. N. Lockington.
pp. 248–251.

P. 141. Description of a new species of ray (*Raia rhina*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 251–253.

P. 142. Description of a new species of parrot of the genus *Chrysotis*, from the island of Dominica. By George N. Lawrence.
pp. 254–257.

P. 143. The eulachon or candle-fish of the northwest coast. By James G. Swan.
pp. 257–264.

P. 144. Description of two new species of fishes (*Ascelichthys rhodorus* and *Scytalina cerdale*), from Neah Bay, Washington territory. By David S. Jordan and Charles H. Gilbert.
pp. 264–268.

P. 145. On *Camaraphysema*, a new type of sponge. By John A. Ryder.
pp. 269–273, 7 figs.

P. 146. Description of two new species of scopeloid fishes (*Sudis ringens* and *Myctophum crenulare*), from Santa Barbara Channel, California. By David S. Jordan and Charles H. Gilbert.
pp. 273–276.

P. 147. Description of two new species of flounders (*Parophrys ischyrus* and *Hippoglossoides classodon*), from Puget Sound. By David S. Jordan and Charles H. Gilbert.
pp. 276–280.

P. 148. On the genitalia of male eels and their sexual characters. By S. Th. Cattie.
pp. 280–284, 1 fig.

P. 149. Description of a new sparoid fish (*Sparus brachysomus*), from Lower California. By W. N. Lockington.
pp. 284–286.

P. 150. Description of seven new species of sebastoid fishes, from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 287–298.

P. 151. Description of a new embiotocoid (*Abeona aurora*), from Monterey, California, with notes on a related species. By David S. Jordan and Charles H. Gilbert.
pp. 299–301.

P. 152. Description of a new flounder (*Platysomatichthys stomias*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 301–303.

P. 153. Description of a new embiotocoid fish (*Cymatogaster rosacens*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 303–305.

P. 154. Description of a new species of deep-water fish (*Ieichthys lockingtoni*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 305–308.

P. 155. Catalogue of Trochilidæ in the collection of the United States National Museum. By Robert Ridgway.
pp. 308–320.

P. 156. Description of a new embiotocoid fish (*Ditrema atripes*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 320–322.

P. 157. Description of a new scorpænoid fish (*Sebastichthys maliger*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 322–324.

P. 158. Note on a new flat-fish (*Lepidopsetta isolepis*), found in the markets of San Francisco. By W. N. Lockington.
p. 325.

P. 159. Note on a forgotten paper of Dr. Ayres and its bearing on the nomenclature of the cyprinoid fishes of the San Francisco markets. By David S. Jordan.
pp. 325–327.

P. 160. Note on "*Sema*" and "*Dacentrus*." By David S. Jordan.
p. 327.

P. 161. Description of a new scorpænoid fish (*Sebastichthys proriger*), from Monterey Bay, California. By David S. Jordan.
pp. 327–329.

P. 162. Description of a new agonoid (*Agonus velsus*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 330–332.

P. 163. List of species and varieties of minerals in the National Museum of the United States in 1879. By Fred. M. Endlich.
pp. 333–335.

P. 164. Description of a new species of *Hemirhamphus* (*Hemirhamphus rosæ*), from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 335–336.

P. 165. Descriptions of seven new species of fishes from deep-sea soundings on the southern New England coast, with diagnoses of two undescribed genera of flounders and a genus related to *Merlucius*. By G. Brown Goode.
pp. 337–350.

P. 166. Description of a new species of *Icterus* from the West Indies. By George N. Lawrence.
p. 351.

P. 167. Description of a new species of notidanoid shark (*Hexanchus corinus*), from the Pacific coast of the United States. By David S. Jordan and Charles H. Gilbert.
pp. 352–355.

P. 168. Notice of recent additions to the marine invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. (Part II. Mollusca, with notes on Annelida, Echinodermata, etc., collected by the U. S. Fish Commission.) By A. E. Verrill.
pp. 356–405.

P. 169. Notice of recent additions to the marine invertebrata of the northeastern coast of America. (Part III. Catalogue of the Mollusca recently added to the fauna of southern New England.) By A. E. Verrill.
pp. 405–409.

P. 170. Description of a new species of *Nemichthys* (*Nemichthys avocetta*), from Puget Sound. By David S. Jordan and Charles H. Gilbert.
pp. 409–410.

P. 171. Description of a new species of *Paralepis* (*Paralepis coruscans*), from the Straits of Juan de Fuca. By David S. Jordan and Charles H. Gilbert.
pp. 411–413.

P. 172. Preliminary notice of the crustacea dredged, in 64 to 325 fathoms, off the south coast of New England, by the United States Fish Commission in 1890. By S. I. Smith.
pp. 413–452.

P. 173. List of the fishes of the Pacific coast of the United States, with a table showing the distribution of the species. By David S. Jordan and Charles H. Gilbert.
pp. 452–458.

P. 174. On the generic relations of *Belone exilis* Girard. By David S. Jordan and Charles H. Gilbert.
p. 459.

P. 175. Notes on a collection of fishes from Utah Lake. By David S. Jordan and Charles H. Gilbert.
pp. 459–465.

P. 176. Description of a new species of "rock-fish" (*Sebastichthys chrysomelas*) from the coast of California. By David S. Jordan and Charles H. Gilbert.
pp. 465–466.

P. 177. Fishes from the deep water on the south coast of New England, obtained by the United States Fish Commission in the summer of 1880. By G. Brown Goode.
pp. 467–486.

P. 178. Description of a new species of *Caranx* (*Caranx beani*), from Beaufort, North Carolina. By David S. Jordan.
pp. 486–488.

P. 179. On a collection of fishes from eastern Mississippi. By O. P. Hay.
pp. 488–515.

P. 180. Synopsis and descriptions of American Rhinobatidæ. By Samuel Garman.
pp. 516–523.

P. 181. List of North American species of myriapods belonging to the family of the Lysiopetalidæ, with a description of a blind form from Luray Cave, Virginia. By John A. Ryder.
pp. 524–529, 3 figs.

P. 182. Description of a new species of *Prionotus* (*Prionotus stephanophrys*) from the coast of California. By W. N. Lockington.
pp. 529–532.

P. 183. The frigate mackerel *Auxis rochei*, on the New England coast. By G. Brown Goode.
pp. 532–535.

P. 184. *Notacanthus phasganorus*, a new species of Notacanthidæ from the Grand Banks of Newfoundland. By G. Brown Goode.
pp. 535–537.

VOLUME IV, CONTAINING PAPERS 185–256.

Department of the Interior: | U. S. National Museum. | —— 27 —— | Proceedings | of the | United States National Museum. | Vol. IV. | 1881. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1882.
8vo., pp. vii, 1–534+142;[1] 1 plate, 13 figs.

P. 185. Check-list of duplicates of fishes from the Pacific coast of North America, distributed by the Smithsonian Institution in behalf of the United States National Museum, 1881. By David S. Jordan and Pierre L. Jouy.
pp. 1–18.

P. 186. Description of a new species of *Squalius* (*Squalius aliciæ*), from Utah Lake. By Pierre L. Jouy.
p. 19.

P. 187. Description of a new gobioid fish (*Othonops eos*), from San Diego, California. By Rosa Smith.
pp. 19–21.

P. 188. On a duck new to the North American fauna. By Robert Ridgway.
pp. 22–24.

---

[1] Circulars 1–18.

P. 189. On *Amazilia yucatanensis* Cabot, and *A. cerriniventris* Gould. By Robert Ridgway.
pp. 25–26.

P. 190. Descriptions of new species of fishes (*Uranidea marginata*, *Potamocottus bendirei*) and of *Myctophum crenulare* J. and G. By Tarleton H. Bean.
pp. 26–29.

P. 191. Notes on the fishes of the Pacific coast of the United States. By David S. Jordan and Charles H. Gilbert.
pp. 29–70.

P. 192. Description of *Sebastichthys mystinus*. By David S. Jordan and Charles H. Gilbert.
pp. 70–72.

P. 193. Description of a new species of *Ptychochilus* (*Ptychochilus harfordi*), from the Sacramento River. By David S. Jordan and Charles H. Gilbert.
pp. 72–73.

P. 194. Note on *Raia inornata*. By David S. Jordan and Charles H. Gilbert.
pp. 73–74.

P. 195. On the fish-mortality in the Gulf of Mexico. By Ernest Ingersoll.
pp. 74–80.

P. 196. Notes on Salmonidæ of the Upper Columbia. By Charles Bendire.
pp. 81–87, 1 fig.

P. 197. A review of the genera and species of the family Centrarchidæ, with a description of one new species. By Charles L. McKay.
pp. 87–93.

P. 198. A review of the genus *Centurus*, Swainson. By Robert Ridgway.
pp. 93–119.

P. 199. Observations on *Siredon lichenoides*. By William E. Carlin.
pp. 120–121.

P. 200. On the destruction of fish by poisonous water in the Gulf of Mexico. By Joseph Y. Porter.
pp. 121–123.

P. 201. An analysis of water destructive to fish in the Gulf of Mexico. By F. M. Endlich.
p. 124.

P. 202. Fish mortality in the Gulf of Mexico. By M. A. Moore.
pp. 125–126.

P. 203. On the destruction of fish by polluted waters in the Gulf of Mexico. By W. C. W. Glazier.
pp. 126–127.

P. 204. Notes on some fishes from Hudson's Bay. By Tarleton H. Bean.
pp. 127–129.

P. 205. On the mineralogical composition of the normal mesozoic diabase upon the Atlantic border. By George W. Hawes.
pp. 129–134.

P. 206. On the determination of feldspar in thin sections of rocks. By George W. Hawes.
pp. 134–136.

P. 207. On certain cretaceous fossils from Arkansas and Colorado. By C. A. White.
pp. 136–139, 1 plate.

P. 208. Description of a new species of *Gobiesox* (*Gobiesox rhessodon*), from San Diego, California. By Rosa Smith.
pp. 140–141.

P. 209. Description of a new genus and species of Cottidæ. By W. N. Lockington.
pp. 141–144.

P. 210. Description of new fishes from Alaska and Siberia. By Tarleton H. Bean.
pp. 144–159.

P. 211. Description of a new species of fish (*Apogon pandionis*) from the deep water off the mouth of Chesapeake Bay. By G. Brown Goode and Tarleton H. Bean.
pp. 160–161.

P. 212. Metallic casting of delicate natural objects. (Translation.)
p. 161.

P. 213. The occurrence of the Canadian porcupine in Maryland. By Otto Lugger.
pp. 161–162.

P. 214. Note on the latiloid genera. By Theodore Gill.
pp. 162–164.

P. 215. List of species of Middle and South American birds not contained in the United States National Museum. By Robert Ridgway.
pp. 165–203.

P. 216. Description of a new subspecies of *Loxigilla* from the island of St. Christopher, West Indies. By George N. Lawrence.
pp. 204–205.

P. 217. Notes on the mortality of fishes of the Gulf of Mexico. By S. H. Johnson.
p. 205.

P. 218. The comparative action of dry heat and sulphurous acid upon putrefactive bacteria. [Experiments by D. Wermch.]
p. 206.

P. 219. List of special desiderata among North American birds. By Robert Ridgway.
pp. 207–223.

P. 220. On Semper's method of making dry preparations.
pp. 224–225.

P. 221. Notes on a collection of fishes, made by Lieut. Henry E. Nichols, U. S. N., on the west coast of Mexico, with descriptions of new species. By David S. Jordan and Charles H. Gilbert.
pp. 225–233.

P. 222. Report on the contents of two bottles of water from the Gulf of Mexico, forwarded by the Smithsonian Institution. By W. G. Farlow.
p. 234.

P. 223. Remains of the walrus (?) in Maine. By C. H. Boyd.
pp. 234–235.

P. 224. Directions for collecting and preserving fish. By Tarleton H. Bean.
pp. 235–238.

P. 225. A preliminary catalogue of the fishes of Alaskan and adjacent waters. By Tarleton H. Bean.
pp. 239–272.

P. 226. Methods of making and preserving plaster casts. By Anthony Pirz.
pp. 272–273.

P. 227. List of fishes collected by Lieut. Henry E. Nichols, U. S. N., in the Gulf of California and on the west coast of Lower California, with descriptions of four new species. By David S. Jordan and Charles H. Gilbert.
pp. 273–279.

P. 228. On the genera of chitons. By William H. Dall.
pp. 279–291.

P. 229. Notes on certain aboriginal shell-mounds on the coast of New Brunswick and of New England. By Spencer F. Baird.
pp. 292–297.

P. 230. List of marine invertebrates, mainly from the New England coast, distributed by the United States National Museum. Series II. By Richard Rathbun.
pp. 298–303.

P. 231. List of marine invertebrates from the New England coast, distributed by the United States National Museum. Series III. Educational series. By Richard Rathbun.
pp. 304–307.

P. 232. Catalogue of a collection of Japanese woods presented to the United States National Museum by the University of Tokio, Japan. By Lester F. Ward.
pp. 308–311.

P. 233. A partial bibliography of the fishes of the Pacific coast of the United States and of Alaska, for the year 1880. By Tarleton H. Bean.
pp. 312–317.

P. 234. Catalogue of Old World birds in the United States National Museum. By Robert Ridgway.
pp. 317–333.

P. 235. Notes on some Costa Rican birds. By Robert Ridgway.
pp. 333–337.

P. 236. Description of a new fly-catcher and a supposed new petrel from the Sandwich Islands. By Robert Ridgway.
pp. 337–338.

P. 237. Description of thirty-three new species of fishes from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 338–365.

P. 238. Description of a new owl from Porto Rico. By Robert Ridgway.
pp. 366–371.

P. 239. Description of two new races of *Myadestes obscurus* Lafr. By Leonhard Stejneger.
pp. 371–374.

P. 240. Description of two new thrushes from the United States. By Robert Ridgway.
pp. 374–379.

P. 241. *Benthodesmus*, a new genus of deep-sea fishes, allied to *Lepidopus*. By G. Brown Goode and Tarleton H. Bean.
pp. 379–383.

P. 242. Description of a new species of *Pomadasys* from Mazatlan, with a key to the species known to inhabit the Pacific coasts of tropical America. By David S. Jordan and Charles H. Gilbert.
pp. 383–388.

P. 243. The rapid preparation of large myological specimens. By M. Felix Plateau.
pp. 388–391.

P. 244. On the Chinook names of the salmon in the Columbia River. By Silas B. Smith.
pp. 391–392.

P. 245. Remarks on the osteology of *Opheosaurus ventralis*. By R. W. Shufeldt.
pp. 392–400, 9 figs.

P. 246. On certain limpets and chitons from the deep waters off the eastern coast of the United States. By William H. Dall.
pp. 400–414.

P. 247. On two recent additions to the North American bird fauna, by L. Belding. By Robert Ridgway.
pp. 414–415.

P. 248. The taxonomonic relations and geographical distribution of the members of the sword-fish family, Xiphidæ. By G. Brown Goode.
pp. 415–433.

P. 249. On the North American land tortoises of the genus *Xerobates*. By Frederick W. True.
pp. 434–449, 3 figs.

P. 250. Catalogue of a collection of Japanese cotton fiber presented to the United States National Museum by the Government of Japan together with the amount of the annual crop of Japan and the price of cotton. (Prepared by the Japanese legation.)
pp. 449–452.

P. 251. Brief account of cotton husbandry in Japan. (Prepared by the Japanese legation.)
pp. 452–453.

P. 252. Description of a new species of *Xeniehthys* (*Xeniehthys xenurus*) from the west coast of Central America. By David S. Jordan and Charles H. Gilbert.
p. 454.

P. 253. List of anthropological publications. By Charles Rau.
pp. 455–458.

P. 254. Description of five new species of fishes from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 458–463.

P. 255. Notes on a collection of fishes made by Capt. Henry F. Nichols, U. S. N., in British Columbia and southern Alaska, with descriptions of new species and a new genus (*Delolepis*). By Tarleton H. Bean.
pp. 463–474.

P. 256. On the rare rodent *Cricetodipus parvus* (Baird) Coues. By Frederick W. True.
pp. 474–475.

VOLUME V, CONTAINING PAPERS 257–342.

Department of the Interior: | U. S. National Museum. | —— 34 —— | Proceedings | of the | United States National Museum. | Vol. V. | 1882. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1883.
8vo., pp. xi, 1–703, 12 pls., 52 figs.

P. 257. Information concerning some fossil trees in the United States National Museum. By P. T. Swaine and J. T. C. Hegewald.
pp. 1–3.

P. 258. A study of the Phronimidæ of the North Pacific surveying expedition. By Thomas H. Streets.
pp. 3–9, 1 plate.

P. 259. Description of several new races of North American birds. By Robert Ridgway.
pp. 9–15.

P. 260. Synopsis of the West Indian *Myadestes*. By Leonhard Stejneger.
pp. 15–27, 1 plate.

P. 261. On some generic and specific appellations of North American and European birds. By Leonhard Stejneger.
pp. 28–43.

P. 262. On the genera *Harporhynchus*, *Cabanis*, and *Methriopterus*, Reichenbach, with a description of a new genus of Miminæ. By Robert Ridgway.
pp. 43–46.

P. 263. On a phosphatic sandstone from Hawthorne, in Florida. By George W. Hawes.
pp. 46–48.

P. 264. Notes on the native trees of the Lower Wabash and White river valleys, in Illinois and Indiana. By Robert Ridgway.
pp. 49–88.

P. 265. Notes on fishes collected by Capt. Charles Bendire, U. S. A., in Washington territory and Oregon, May to October, 1881. By Tarleton H. Bean.
pp. 89–93.

P. 266. New molluscan forms from the Laramie and Green River groups, with discussion of some associated forms heretofore known. By Charles A. White.
pp. 94–99, 2 pls.

P. 267. The molluscan fauna of the Truckee group, including a new form. By Charles A. White.
pp. 99–102, 1 plate.

P. 268. Description of four new species of sharks, from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 102–110.

P. 269. Description of a new shark (*Carcharias lamiella*), from San Diego, California. By David S. Jordan and Charles H. Gilbert.
pp. 110–111.

P. 270. Critical remarks on the tree-creepers (*Certhia*) of Europe and America. By Robert Ridgway.
pp. 111–116.

P. 271. Note on the occurrence of a silver lamprey (*Ichthyomyzon castaneus* Girard), in Louisiana. By Tarleton H. Bean.
pp. 117–119.

P. 272. Notes on a collection of fishes from Johnston's Island, including descriptions of five new species. By Rosa Smith and Joseph Swain.
pp. 119–143.

P. 273. Description of a new cyprinodont (*Zygonectes inurus*), from southern Illinois. By David S. Jordan and Charles H. Gilbert.
pp. 143–144.

P. 274. Notes on birds collected during the summer of 1880 in Alaska and Siberia. By Tarleton H. Bean.
pp. 144-173.

P. 275. Outlines of a monograph of the Cygninæ. By Leonhard Stejneger.
pp. 174-221, 16 figs.

P. 276. Notes on the habits and rearing of the axolotl, *Amblystoma mexicanum*. By M. Carbonnier.
pp. 221-222.

P. 277. Description of a new species of *Uranidea* (*Uranidea pollicaris*), from Lake Michigan. By David S. Jordan and Charles H. Gilbert.
pp. 222-223.

P. 278. Observations on four mules in milk. By Alfred Dugès.
pp. 223-225.

P. 279. On *Lagopus mutus* Leach, and its allies. By Lucien M. Turner.
pp. 225-233.

P. 280. Genera of the Scolopendrellidæ. By J. A. Ryder.
p. 234.

P. 281. A list of the species of fishes recorded as occurring in the Gulf of Mexico. By G. Brown Goode and Tarleton H. Bean.
pp. 234-240.

P. 282. Notes on fishes observed about Pensacola, Florida, and Galveston, Texas, with description of new species. By David S. Jordan and Charles H. Gilbert.
pp. 241-307.

P. 283. A review of the Syngnathinæ of the United States, with a description of one new species. By Joseph Swain.
pp. 307-315.

P. 284. Notice of recent additions to the marine invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. (Part IV. Additions to the deep-water mollusca, taken off Martha's Vineyard, in 1880 and 1881.) By A. E. Verrill.
pp. 315-343.

P. 285. Descriptions of some new North American birds. By Robert Ridgway.
pp. 343-346.

P. 286. Description of a new species of *Uranidea* (*Uranidea rhothea*) from Spokane River, Washington territory. By Rosa Smith.
pp. 347-348.

P. 287. On the eastward distribution of the black-tailed deer (*Cariacus columbianus*). By Charles Bendire.
pp. 348-349.

P. 288. Description of a new species of blenny (*Isesthes gilberti*) from Santa Barbara, California. By David S. Jordan.
pp. 349-351.

P. 289. Description of a new species of *Conodon* (*Conodon serrifer*), from Boca Soledad, Lower California. By David S. Jordan and Charles H. Gilbert.
pp. 351–352.

P. 290. Catalogue of the fishes collected by Mr. John Xantus at Cape San Lucas, which are now in the United States National Museum, with descriptions of eight new species. By David S. Jordan and Charles H. Gilbert.
pp. 353–371.

P. 291. List of fishes collected by Mr. John Xantus at Colima, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 371–372.

P. 292. List of fishes collected at Panama by Capt. John M. Dow, now in the United States National Museum. By David S. Jordan and Charles H. Gilbert.
pp. 373–378.

P. 293. List of a collection of fishes made by Mr. L. Belding near Cape San Lucas, Lower California. By David S. Jordan and Charles H. Gilbert.
pp. 378–381.

P. 294. List of fishes collected at Panama by Rev. Mr. Rowell, now preserved in the United States National Museum. By David S. Jordan and Charles H. Gilbert.
pp. 381–382.

P. 295. On a collection of birds from the Hacienda "La Palma," Gulf of Nicoya, Costa Rica. [With critical notes by R. Ridgway.] By C. C. Nutting.
pp. 382–409.

P. 296. Descriptions of two new species of fishes (*Sebastichthys umbrosus* and *Citharichthys stigmæus*), collected at Santa Barbara, California, by Andrea Larco. By David S. Jordan and Charles H. Gilbert.
pp. 410–412.

P. 297. Descriptions of twenty-five new species of fish from the southern United States, and three new genera, *Lethæcus*, *Ioglossus*, and *Chriodorus*. By G. Brown Goode and Tarleton H. Bean.
pp. 412–437.

P. 298. Description of a new species of goby (*Gobiosoma ios*), from Vancouver's Island. By David S. Jordan and Charles H. Gilbert.
pp. 437–438.

P. 299. Descriptions of new species of reptiles and amphibians in the United States National Museum. By H. C. Yarrow.
pp. 438–443.

P. 300. Contribution to the miocene flora of Alaska. By L. Lesquereux.
pp. 443–449, 5 pls.

P. 301. Remarks on the systematic arrangement of the American Turdidæ. By Leonhard Stejneger.
pp. 449–483, 33 figs.

P. 302. On the family Centropomidæ. By Theodore Gill.
pp. 484–485, 1 plate.

P. 303. Nomenclature of the Xiphiids. By Theodore Gill.
pp. 485–486.

P. 304. On the family and subfamilies of Carangidæ. By Theodore Gill.
pp. 487–493.

P. 305. Catalogue of a collection of birds made in the interior of Costa Rica by Mr. C. C. Nutting. By Robert Ridgway.
pp. 493–502.

P. 306. Brief descriptions of fossil plants, chiefly tertiary, from western North America. By J. S. Newberry.
pp. 502–511.

P. 307. Note on the Leptocardians. By Theodore Gill.
pp. 515–516.

P. 308. Note on the Myzonts or Marsipobranchiates. By Theodore Gill.
pp. 516–517.

P. 309. Note on the Bdellostomidæ and Myxinidæ. By Theodore Gill.
pp. 517–520.

P. 310. Note on the Petromyzontids. By Theodore Gill.
pp. 521–525.

P. 311. Description of a new warbler from the island of Santa Lucia, West Indies. By Robert Ridgway.
pp. 525–526.

P. 312. Description of a supposed new plover from Chili. By Robert Ridgway.
pp. 526–527.

P. 313. Catalogue of a collection of birds made at various points along the western coast of Lower California, north of Cape Saint Eugenio. [Edited by R. Ridgway.] By L. Belding.
pp. 527–532.

P. 314. Catalogue of a collection of birds made near the southern extremity of the peninsula of Lower California. [Edited by R. Ridgway.] By L. Belding.
pp. 532–550.

P. 315. On the genus *Tantalus* Linn., and its allies. By Robert Ridgway.
pp. 550–551.

P. 316. Supplementary note on the Pediculati. By Theodore Gill.
pp. 551–556.

P. 317. Note on the Pomatomidæ. By Theodore Gill.
p. 557.

P. 318. Note on the affinities of the Ephippiids. By Theodore Gill.
pp. 557–560.

P. 319. On the relations of the family Lobotidæ. By Theodore Gill.
pp. 560–561.

P. 320. Note on the relationships of the Echeneidids. By Theodore Gill.
pp. 561–566, 1 plate.

P. 321. Note on the genus *Sparus*. By Theodore Gill.
pp. 566–567.

P. 322. On the proper name of the blue fish. By Theodore Gill.
pp. 567–570.

P. 323. Does the panther (*Felis concolor*) go into the water to kill fish? By Livingston Stone.
p. 570.

P. 324. On certain neglected generic names of La Cépède. By David S. Jordan and Charles H. Gilbert.
pp. 570–576.

P. 325. On the synonymy of the genus *Bothus* Rafinesque. By David S. Jordan and Charles H. Gilbert.
pp. 576–577.

P. 326. Description of a new species of *Artedius* (*Artedius fenestralis*), from Puget Sound. By David S. Jordan and Charles H. Gilbert.
pp. 577–579.

P. 327. Description of a new species of *Urolophus* (*Urolophus asterias*), from Mazatlan and Panama. By David S. Jordan and Charles H. Gilbert.
pp. 579–580.

P. 328. Notes on a collection of fishes from Charleston, South Carolina, with descriptions of three new species. By David S. Jordan and Charles H. Gilbert.
pp. 580–620.

P. 329. List of fishes in the museum of Yale College, collected by Prof Frank H. Bradley, at Panama, with descriptions of three new species. By David S. Jordan and Charles H. Gilbert.
pp. 620–632.

P. 330. Jumping seeds and galls. By Charles V. Riley.
pp. 632–635, 1 fig.

P. 331. Note on cluster flies. By William H. Dall.
pp. 635–637.

P. 332. A review of the genus *Noturus*, with a description of one new species. By Joseph Swain and George B. Kalb.
pp. 638–644

P. 333. Catalogue of a collection of samples of raw cotton presented to the United States National Museum by the International Cotton Exposition, Atlanta, Georgia, 1881. By S. M. Inman.
pp. 644–645.

P. 334. Description of two new species of fishes (*Myrophis rafer* and *Chloroscombrus orqueta*) from Panama. By David S. Jordan and Charles H. Gilbert.
pp. 645–647.

P. 335. Description of a new eel (*Sidera castanea*), from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 647–648.

P. 336. On the nomenclature of the genus *Ophichthys*. By David S. Jordan and Charles H. Gilbert.
pp. 648–651.

P. 337. On the life coloration of the young of *Pomacentrus rubicundus*. By Rosa Smith.
pp. 652–653.

P. 338. On a cinnamon bear from Pennsylvania. By Frederick W. True.
pp. 653–656.

P. 339. Description of a new petrel from Alaska. By Robert Ridgway.
pp. 656–658.

P. 340. Description of a species of whitefish, *Coregonus hoyi* (Gill) Jordan, called "smelt" in some parts of New York. By Tarleton H. Bean.
pp. 658–660.

P. 341. Note on a Potsdam sandstone, or conglomerate, from Berks County, Pennsylvania. By George P. Merrill.
pp. 660–661.

P. 342. Description of a new species of *Alepidosaurus* (*A. æsculapius*), from Alaska. By Tarleton H. Bean.
pp. 661–663.

VOLUME VI, CONTAINING PAPERS 343–396.

Department of the Interior: | U. S. National Museum. | —— | Proceedings | of the | United States National Museum. | Vol. VI. | 1883. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1884.
8vo., pp. vii, 1–530,[1] 11 pls., 6 figs.

P. 343. Preliminary report on the brachyura and anomura dredged in deep water off the south coast of New England by the United States Fish Commission in 1880, 1881, and 1882. By Sidney I. Smith.
pp. 1–57, 6 pls.

P. 344. Contributions to the history of the Commander Islands. No. 1. Notes on the natural history, including descriptions of new cetaceans. By Leonhard Stejneger.
pp. 58–89.

---

[1] Includes circulars 19–23.

P. 345. Descriptions of some birds supposed to be undescribed, from the Commander Islands and Petropaulovski, collected by Dr. Leonhard Stejneger, U. S. Signal Service. By Robert Ridgway.
pp. 90-96.

P. 346. Description of a new genus and species of alcyonoid polyp, from Japanese waters, with remarks on the structure and habits of related forms, etc. By Robert E. C. Stearns.
pp. 96-101, 1 plate.

P. 347. Report on a fragment of cloth taken from a mound in Ohio. By J. G. Hunt.
pp. 101-102.

P. 348. *Lucilia macellaria* infesting man. By Fred. Humbert.
pp. 103-105.

P. 349. Fish mortality in the Gulf of Mexico. By S. T. Walker.
pp. 105-109.

P. 350. The generic names *Amitra* and *Thyris* replaced. By G. Brown Goode.
p. 109.

P. 351. Shell beds in Westchester, New York. By Merritt Willis.
p. 109.

P. 352. Notes on the nomenclature of certain North American fishes. By David S. Jordan and Charles H. Gilbert.
pp. 110-111.

P. 353. Notes on the natural history of Labrador. By W. A. Stearns.
pp. 111-137.

P. 354. On the black nodules or so-called inclusions in the Maine granites. By George P. Merrill.
pp. 137-141.

P. 355. Description of two new species of fishes (*Aprion ariommus* and *Ophidium beani*), from Pensacola, Florida. By David S. Jordan and Charles H. Gilbert.
pp. 142-144.

P. 356. On the probable identity of *Motacilla ocularis* Swinhoe and *M. amurensis* Seebohm, with remarks on an allied supposed species, *M. blackistoni* Seebohm. By Robert Ridgway.
pp. 144-147.

P. 357. The first occurrence of *Pseudotriacis microdon* Capello, on the coast of the United States. By Tarleton H. Bean.
pp. 147-150.

P. 358. On a pair of abnormal antlers of the Virginia deer. By Frederick W. True.
p. 151, 1 fig.

P. 359. Description of new species of reptiles in the United States National Museum. By H. C. Yarrow.
pp. 152-154.

P. 360. Description of some new birds from Lower California, collected by Mr. L. Belding. By Robert Ridgway.
pp. 154–156.

P. 361. *Anthus cervinus* Pallas, in Lower California. By Robert Ridgway.
pp. 156–157.

P. 362. Note on *Merula confinis* Baird. By Robert Ridgway.
pp. 158–159.

P. 363. Preliminary note on the crystalline schists of the District of Columbia. By George P. Merrill.
pp. 159–161.

P. 364. Catalogue of a collection of ethnological specimens obtained from the Ugashagmut tribe, Ugashak River, Bristol Bay, Alaska. By William J. Fisher.
pp. 161–165.

P. 365. On the collection of Maine building stones in the United States National Museum. By George P. Merrill.
pp. 165–183.

P. 366. On the *Macrocheilus* of Phillips, *Plectostylus* of Conrad, and *Soleniscus* of Meek and Worthen. By Charles A. White.
pp. 184–187, 1 plate.

P. 367. A review of the American Caranginæ. By David S. Jordan and Charles H. Gilbert.
pp. 188–207.

P. 368. Note on the genera of Petromyzontidæ. By David S. Jordan and Charles H. Gilbert.
p. 208.

P. 369. Description of a new Murænoid eel (*Sidera chlerastes*), from the Galapagos islands. By David S. Jordan and Charles H. Gilbert.
pp. 208–210.

P. 370. Description of a new species of *Rhinobatus* (*Rhinobatus glaucostigma*), from Mazatlan, Mexico. By David S. Jordan and Charles H. Gilbert.
pp. 210–211.

P. 371. List of duplicate marine invertebrates distributed by the United States National Museum. Series IV. Educational Series No. 2. By Richard Rathbun.
pp. 212–216.

P. 372. The life colors of *Cremnobates integripinnis*. By Rosa Smith.
pp. 216–217.

P. 373. Note on the occurrence of *Gasterosteus williamsoni* Grd., in an artesian well at San Bernardino, California. By Rosa Smith.
p. 217.

P. 374. List of the crustacea dredged on the coast of Labrador by the expedition under the direction of W. A. Stearns, in 1882. By Sidney I. Smith.
pp. 218–222.

P. 375. Review of the marine crustacea of Labrador. By Sidney I. Smith.
pp. 223–232.

P. 376. Notes on the fishes of Todos Santos Bay, Lower California. By Rosa Smith.
pp. 232–236.

P. 377. Catalogue of mollusca and echinodermata dredged on the coast of Labrador by the expedition under the direction of Mr. W. A. Stearns, in 1882. By Katharine J. Bush.
pp. 236–247, 1 plate.

P. 378. List of fishes collected in the Clear Fork of the Cumberland, Whitley County, Kentucky, with descriptions of three new species. By David S. Jordan and Joseph Swain.
pp. 248–251.

P. 379. A description of a new species of *Hadropterus* (*Hadropterus scierus*) from southern Indiana. By Joseph Swain.
p. 252.

P. 380. Diagnoses of new genera and species of deep-sea fish-like vertebrates. By Theodore Gill.
pp. 253–260.

P. 381. Diagnoses of new genera of nemichthyoid eels. By Theodore Gill and John A. Ryder.
pp. 260–262.

P. 382. On the anatomy and relations of the Eurypharyngidæ. By Theodore Gill and John A. Ryder.
pp. 262–273.

P. 383. Ornithological notes on collections made in Japan from June to December, 1882. By Pierre L. Jouy.
pp. 273–318.

P. 384. On a collection of shells sent from Florida by Mr. Henry Hemphill. By William H. Dall.
pp. 318–342, 1 plate.

P. 385. List of birds found at Guaymas, Sonora, in December, 1882, and April, 1883. By L. Belding.
pp. 343–344.

P. 386. Second catalogue of a collection of birds made near the southern extremity of Lower California. [Edited by R. Ridgway.] By L. Belding.
pp. 344–352.

P. 387. Notes on a collection of fishes made in 1882 and 1883 by Capt. Henry E. Nichols, U. S. N., in Alaska and British Columbia, with a description of a new genus and species, *Prionistius macellus*. By Tarleton H. Bean.
pp. 353–361.

P. 388. Notes on some fishes collected by James G. Swan in Washington territory, including a new species of *Macrurus*. By Tarleton H. Bean.
pp. 362–364.

P. 389. Notes on fishes observed at the head of Chesapeake Bay in the spring of 1882; and upon other species of the same region. By Tarleton H. Bean.
pp. 365–367.

P. 390. Notes on some Japanese birds related to North American species. By Robert Ridgway.
pp. 368–371.

P. 391. On a collection of birds from Nicaragua. [Edited by R. Ridgway.] By Charles C. Nutting.
pp. 372–410.

P. 392. On some Costa Rican birds, with descriptions of several supposed new species. By Robert Ridgway.
pp. 410–415.

P. 393. On an antique Roman mosaic from Carthage, now in the United States National Museum. By G. H. Heap.
pp. 415–417.

P. 394. On the skeleton of *Phoca* (*Histriophoca*) *fasciata* Zimmerman. By Frederick W. True.
pp. 417–426, 4 pls., 1 fig.

P. 395. On the source of the jadeite implements of the Alaskan Innuits. By E. W. Nelson.
pp. 426–427.

P. 396. On the origin of the fossil bones discovered in the vicinity of Tise's Ford, Florida. By S. T. Walker.
pp. 427–429.

VOLUME VII, CONTAINING PAPERS 397–469.

Department of the Interior: | U. S. National Museum. | —— | Proceedings | of the | United States National Museum. | Vol. VII. | 1884. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1885.
8vo., pp. viii, 1–661,[1] 2 pls., 15 figs.

P. 397. List of, and notes upon, the lichens collected by Dr. T. H. Bean in Alaska and the adjacent region in 1880. By J. T. Rothrock.
pp. 1–9.

P. 398. On the chlorophylloid granules of *Vorticella*. By John A. Ryder.
pp. 9–12, 1 fig.

P. 399. A new geographical race of the mountain sheep (*Ovis montana dalli* var. nov.), from Alaska. By E. W. Nelson.
pp. 12–13.

P. 400. Note on *Selasphorus torridus* Salvin. By Robert Ridgway.
p. 14.

---

[1] Including circulars 24–31.

P. 401. A review of the species of the genus *Calamus*. By David S. Jordan and Charles H. Gilbert.
pp. 14–24.

P. 402. Descriptions of ten new species of fishes from Key West, Florida. By David S. Jordan and Charles H. Gilbert.
pp. 24–32.

P. 403. Note on *Caranx ruber* and *Caranx bartholomæi*. By David S. Jordan and Charles H. Gilbert.
pp. 32–33.

P. 404. Notes on a collection of fishes from Pensacola, obtained by Silas Stearns, with descriptions of two new species (*Exocœtus volador* and *Gnathypops mystacinus*). By David S. Jordan.
pp. 33–40.

P. 405. Note on *Æluriichthys cydouxii* and *Porichthys porosissimus*. By David S. Jordan.
pp. 40–41.

P. 406. Notes on some Florida fishes. By G. Brown Goode and Tarleton H. Bean.
pp. 42–47.

P. 407. Description of a new species of whitefish (*Coregonus nelsonii*), from Alaska. By Tarleton H. Bean.
p. 48.

P. 408. On the literature and systematic relations of the saccopharyngoid fishes. By Theodore Gill and John A. Ryder.
pp. 48–65, 1 plate.

P. 409. On domesticated hybrid ducks (*Anas boschas*+*obscura*). By Elisha Slade.
p. 66.

P. 410. On prochlorite from the District of Columbia. By George P. Merrill.
p. 67.

P. 411. *Melanetta fusca* (Linn.) in Alaska. By Robert Ridgway.
p. 68.

P. 412. Description of a new snow bunting from Alaska. By Robert Ridgway.
pp. 68–70.

P. 413. On the use of trinominals in American ornithology. By Leonhard Stejneger.
pp. 70–81.

P. 414. Descriptions of scaroid fishes from Havana and Key West, including five new species. By David S. Jordan and Joseph Swain.
pp. 81–102.

P. 415. Description of a new species of *Sphærium*. By Temple Prime.
pp. 102–103.

P. 416. List of fishes collected at Key West, Florida, with notes and descriptions. By David S. Jordan.
pp. 103–150.

P. 417. Note on *Calamus providens*, a new species of *Calamus*. By David S. Jordan and Charles H. Gilbert.
p. 150.

P. 418. A catalogue of the fishes received from the Public Museum of the Institute of Jamaica, with descriptions of *Pristipoma approximans* and *Tylosurus euryops*, two new species. By Tarleton H. Bean and H. G. Dresel.
pp. 151–170.

P. 419. On a new muskrat, *Neofiber alleni*, from Florida. By Frederick W. True.
pp. 170–172.

P. 420. On a collection of birds made by Messrs. J. E. Benedict and W. Nye, of the United States Fish Commission steamer *Albatross*. By Robert Ridgway.
pp. 172–180.

P. 421. Contributions to the history of the Commander Islands. No. 2. Investigations relating to the date of the extermination of Steller's sea-cow. By Leonhard Stejneger.
pp. 181–189.

P. 422. An identification of the figures of fishes in Catesby's "Natural History of Carolina, Florida, and the Bahama Islands." By David S. Jordan.
pp. 190–199.

P. 423. A list of fishes collected in the east fork of White River, Indiana, with descriptions of two new species. By Charles H. Gilbert.
pp. 199–205.

P. 424. Notes on the fishes of Switz City swamp, Greene County, Indiana. By Charles H. Gilbert.
pp. 206–210.

P. 425. Remarks on the species of the genus *Cephus*. By Leonhard Stejneger.
pp. 210–229, 6 figs.

P. 426. Notes on fishes collected by David S. Jordan at Cedar Keys, Florida. By David S. Jordan and Joseph Swain.
pp. 230–234.

P. 427. List of fishes observed in the Saint John's River at Jacksonville, Florida. By David S. Jordan and Seth E. Meek.
pp. 235–237.

P. 428. Notes on the pipe-fishes of Key West, Florida, with a description of *Siphostoma mckayi*, a new species. By Joseph Swain and Seth E. Meek.
pp. 237–239.

P. 429. Descriptions of *Physiculus fulvus* and *Lotella maxillaris*, new species of fishes collected in 1881 by the United States Fish Commission. By Tarleton H. Bean.
pp. 240–242.

P. 430. On the occurrence of the striped bass in the Lower Mississippi valley. By Tarleton H. Bean.
pp. 242–244.

P. 431. Notes on some Greenland fishes. By H. G. Dresel.
pp. 244–258.

P. 432. Description of a new species of field-sparrow from New Mexico. By Robert Ridgway.
p. 259.

P. 433. Notes on fishes collected at Guaymas, Mexico, by Mr. H. F. Emeric, with a description of *Gobiosoma histrio*, a new species. By David S. Jordan.
pp. 260–261.

P. 434. A review of the American species of marine Mugilidæ. By David S. Jordan and Joseph Swain.
pp. 261–275.

P. 435. Synopsis of the genera of the superfamily Teuthidoidea (families Teuthididæ and Siganidæ). By Theodore Gill.
pp. 275–281.

P. 436. A review of the species of the genus *Hæmulon*. By David S. Jordan and Joseph Swain.
pp. 281–317.

P. 437. List of the fishes collected in the vicinity of New Orleans by Dr. R. W. Shufeldt, U. S. A. By David S. Jordan.
pp. 318–322.

P. 438. List of the fishes collected in Lake Jessup, and Indian River, Florida, by Mr. R. E. Earll, with descriptions of two new species. By David S. Jordan.
pp. 322–324.

P. 439. Concerning some of the forms assumed by the patella in birds. By R. W. Shufeldt.
pp. 324–331, 7 figs.

P. 440. Observations upon a collection of insects made in the vicinity of New Orleans, Louisiana, during the years 1882 and 1883. By R. W. Shufeldt.
pp. 331–338, 1 fig.

P. 441. Hermaphrodite fishes. (Translation from "Der Naturforscher.")
pp. 339–340.

P. 442. Contributions to the history of the Commander Islands. No. 3. Report on the mollusca of the Commander Islands, Bering Sea, collected by Leonhard Stejneger in 1882 and 1883. By William H. Dall.
pp. 340–349, 1 plate.

P. 443. Note on the Sternoptychidæ. By Theodore Gill.
pp. 349–351.

P. 444. The osteological characteristics of the Lutjaninæ. By Theodore Gill.
pp. 351–355.

P. 445. A contribution to the terminology of ichthyography. By Theodore Gill.
pp. 356–357.

P. 446. Description of a new species of coot from the West Indies. By Robert Ridgway.
pp. 358.

P. 447. A review of the American species of *Epinephelus* and related genera. By David S. Jordan and Joseph Swain.
pp. 358–410.

P. 448. Synopsis of the plectognath fishes. By Theodore Gill.
pp. 411–427.

P. 449. A review of the species of Lutjaninæ and Hoplopagrinæ found in American waters. By David S. Jordan and Joseph Swain.
pp. 427–474.

P. 450. Description of four new species of Cyprinidæ in the United States National Museum. By David S. Jordan and Seth E. Meek.
pp. 474–477.

P. 451. Descriptions of four new species of *Pœcilichthys* in the United States National Museum. By David S. Jordan.
pp. 477–480.

P. 452. Description of *Sciæna sciera*, a new species of *Sciæna* from Mazatlan and Panama. By David S. Jordan and Charles H. Gilbert.
pp. 480–482.

P. 453. Description of *Zygonectes zonifer*, a new species of *Zygonectes*, from Nashville, Georgia. By David S. Jordan and Seth E. Meek.
p. 482.

P. 454. Annotated list of the described species of parasitic Copepoda (*Siphonostoma*) from American waters contained in the United States National Museum. By Richard Rathbun.
pp. 483–492.

P. 455. On some new or little known decapod crustacea, from recent Fish Commission dredgings off the east coast of the United States. By Sidney I. Smith.
pp. 493–511.

P. 456. Description of three new fishes from Kansas. By Charles H. Gilbert.
pp. 512–514.

P. 457. Description of a new race of the red-shouldered hawk from Florida. By Robert Ridgway.
pp. 514–515.

P. 458. On two hitherto unnamed sparrows from the coast of California. By Robert Ridgway.
pp. 516–518.

P. 459. Description of seven new species of crustacea and one worm from Arctic Alaska. By John Murdoch.
pp. 518–522.

P. 460. New or specially interesting shells of the Point Barrow expedition. By William H. Dall.
pp. 523–526.

P. 461. Description of a new species of *Hybopsis* (*Hybopsis montanus*). By Seth E. Meek.
pp. 526–527.

P. 462. Contributions to the history of the Commander Islands. No. 4. A. Notes upon the plants collected on the Commander Islands (Bering and Copper islands) by Leonhard Stejneger. By Asa Gray.
pp. 527–529.

P. 463. [Contributions to the history of the Commander Islands. No. 4] B. Additional notes on the plants of the Commander Islands. By Leonhard Stejneger.
pp. 529–538.

P. 464. Description of a new species of flounder, *Citharichthys macrops*, from Pensacola, Florida. By H. G. Dresel.
pp. 539–541.

P. 465. Description of three new species of fishes (*Prionotus stearnsi*, *Prionotus ophryas*, and *Anthias vivanus*), collected at Pensacola, Florida, by Mr. Silas Stearns. By David S. Jordan and Joseph Swain.
pp. 541–545.

P. 466. Supplementary notes on North American fishes. By David S. Jordan.
pp. 545–548.

P. 467. Description of a new species of *Hybognathus* (*Hybognathus hayi*) from Mississippi. By David S. Jordan.
pp. 548–550.

P. 468. On the occurrence of *Loncheres armatus* (Geoff.) Wagner, in the island of Martinique, West Indies. By Frederick W. True.
pp. 550–551.

P. 469. Notes on fishes collected at San Cristobal, Lower California, by Mr. Charles H. Townsend, assistant, U. S. Fish Commission. By Rosa Smith.
pp. 551–553.

VOLUME VII, CONTAINING PAPERS 470–548.

Department of the Interior: | U. S. National Museum. | —— | Proceedings | of the | United States National Museum. | Vol. VIII. | 1885. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1886.

8vo., pp. viii, 1–729,[1] 25 pls., 15 figs.

[1] Including circulars 32 and 33.

P. 470. List of fishes collected in Iowa and Missouri in August, 1884, with descriptions of three new species. By David S. Jordan and Seth E. Meek.
pp. 1–17.

P. 471. On *Œstrelata fisheri* and *Œ. defilippiana*. By Robert Ridgway.
pp. 17–18.

P. 472. *Icterus cucullatus* Swainson, and its geographical variations. By Robert Ridgway.
pp. 18–19.

P. 473. *Passer saturatus*, a new species of tree-sparrow from the Liu-Kiu Islands, Japan. By Leonhard Stejneger.
pp. 19–20.

P. 474. Description of a new species of *Contopus* from tropical America. By Robert Ridgway.
p. 21.

P. 475. Note on the *Anser leucopareius* of Brandt. By Robert Ridgway.
pp. 21–22.

P. 476. Description of a new warbler from Yucatan. By Robert Ridgway.
p. 23.

P. 477. Description of two new birds from Costa Rica. By Robert Ridgway.
pp. 23–24.

P. 478. Description of three supposed new honey creepers from the Lesser Antilles, with a synopsis of the species of the genus *Certhiola*. By Robert Ridgway.
pp. 25–30.

P. 479. On hornblende andesites from the new volcano on Bogosloff Island in Bering Sea. By George P. Merrill.
pp. 31–33.

P. 480. On *Cathartes burrovianus* Cassin, and *C. urubitinga* Pelzeln. By Robert Ridgway.
pp. 34–36.

P. 481. On *Onychotes gruberi*. By Robert Ridgway.
pp. 36–38.

P. 482. Notes and descriptions taken from selachians in the U. S. National Museum. By S. Garman.
pp. 39–44.

P. 483. A review of the American species of flying fishes (*Exocœtus*). By David S. Jordan and Seth E. Meek.
pp. 44–67.

P. 484. Notes on skeletons of Etheostomatinæ. By David S. Jordan and Carl H. Eigenmann.
pp. 68–72.

P. 485. Note on the scientific name of the yellow perch, the striped bass, and other North American fishes. By David S. Jordan.
pp. 72–73.

P. 486. Description of a new species of *Plectromus* (*P. crassiceps*), taken by the United States Fish Commission. By Tarleton H. Bean.
pp. 73–74.

P. 487. Description of a new species of *Aspidophoroides* (*A. güntherii*), from Alaska. By Tarleton H. Bean.
pp. 74–75.

P. 488. Remarks on the type specimen of *Buteo oxypterus* Cassin. By Robert Ridgway.
pp. 75–77.

P. 489. Early iron manufacture in Virginia, 1619–1776. By R. A. Brock.
pp. 77–80.

P. 490. Note on Mr. Garman's paper on "The American salmon and trout." By David S. Jordan.
pp. 81–83.

P. 491. Report upon the echini collected by the United States Fish Commission steamer *Albatross*, in the Caribbean Sea and Gulf of Mexico, January to May, 1884. By Richard Rathbun.
pp. 83–89.

P. 492. An account of recent captures of the California sea-elephant, and statistics relating to the present abundance of the species. By Charles H. Townsend.
pp. 90–93.

P. 493. Description of a new species of boat-billed heron from Central America. By Robert Ridgway.
pp. 93–94.

P. 494. Description of a new hawk from Cozumel. By Robert Ridgway.
pp. 94–95.

P. 495. On a new species of porpoise, *Phocæna dalli*, from Alaska. By Frederick W. True.
pp. 95–98, 4 pls.

P. 496. On *Peucæa mexicana* Lawr., a sparrow new to the United States. By Robert Ridgway.
pp. 98–99.

P. 497. On deposits of volcanic dust in southwestern Nebraska. By George P. Merrill.
pp. 99–100, 1 fig.

P. 498. On the influence of atropia on the heart. By H. G. Beyer.
pp. 101–103, 1 plate.

P. 499. Catalogue of the birds of Costa Rica, indicating those species of which the United States National Museum possesses specimens from that country. By José C. Zeledon.
pp. 104–118.

P. 500. Identification of the species of Cyprinidæ and Catostomidæ, described by Dr. Charles Girard, in the "Proceedings of the Academy of Natural Sciences of Philadelphia" for 1856. By David S. Jordan.
pp. 118–127.

P. 501. On the development of viviparous osseous fishes. By John A. Ryder.
pp. 128–155, 6 pls.

P. 502. On certain features of the development of the salmon. By John A. Ryder.
pp. 156–162, 1 plate.

P. 503. On the *Etheostoma variatum* of Kirtland. By David S. Jordan.
pp. 163–165.

P. 504. On the occurrence of *Hadropterus aurantiacus* Cope, in the French Broad River, North Carolina. By Tarleton H. Bean.
pp. 165–166.

P. 505. On the identity of *Cottus maculatus* Fischer, with *Cottus babalis* Euphrasen. By Tarleton H. Bean.
pp. 166–167.

P. 506. Description of a new crustacean allied to *Homarus* and *Nephrops*. By Sidney I. Smith.
pp. 167–170.

P. 507. On some genera and species of Penæidæ, mostly from recent dredgings of the United States Fish Commission. By Sidney I. Smith.
pp. 170–190.

P. 508. On *Stathmonotus*, a new genus of fishes related to Murænoides, from Florida. By Tarleton H. Bean.
pp. 191–192, 1 plate.

P. 509. Note on *Stoasodon narinari* Euphrasen. By Tarleton H. Bean.
pp. 192–193.

P. 510. On the American fishes in the Linnæan collection. By G. Brown Goode and Tarleton H. Bean.
pp. 193–208.

P. 511. Note on *Epinephelus nigritus*. By David S. Jordan.
pp. 208–209.

P. 512. Description of a new species of *Amblystoma* (*Amblystoma copeianum*), from Indiana. By O. P. Hay.
pp. 209–213, 1 plate.

P. 513. List of plants collected by Mr. Charles L. McKay at Nushagak, Alaska, in 1881, for the United States National Museum. By Frank H. Knowlton.
pp. 213–221.

P. 514. The generic name of the Pastinacas, or "sting-rays." By S. Garman.
pp. 221–224.

P. 515. The influence of variations of temperature upon the rate and the work of the heart of the slider terrapin (*Pseudemys rugosa*). By H. G. Beyer.
pp. 225–229, 2 pls.

P. 516. Description of a new species of *Pempheris* (*Pempheris poeyi*) from Cuba. By Tarleton H. Bean.
pp. 229–230.

P. 517. Note on *Epinephelus nigritus*, *Caulolatilus microps*, and *Coryphæna hippurus*. By Tarleton H. Bean.
pp. 230–233.

P. 518. List of the birds of Labrador, including Ungava, East Main, Moose, and Gulf districts of the Hudson Bay Company, together with the island of Anticosti. By Lucien M. Turner.
pp. 233–254.

P. 519. Notes on some Floridian land and fresh-water shells, with a revision of the Auriculacea of the eastern United States. By William H. Dall.
pp. 255–289, 2 pls.

P. 520. A list of the mesozoic and cenozoic types in the collections of the U. S. National Museum. By John Belknap Marcou.
pp. 290–344.

P. 521. On *Turbinella pyrum* Lamarck, and its dentition. By William H. Dall.
pp. 345–348, 1 plate.

P. 522. A review of the American "Golden warblers." By Robert Ridgway.
pp. 348–350.

P. 523. Notes on the mineralogy and lithology of the District of Columbia. By George P. Merrill.
pp. 351–353.

P. 524. Some emended names of North American birds. By Robert Ridgway.
pp. 354–356.

P. 525. A list of the Astacidæ in the United States National Museum. By Walter Faxon.
pp. 356–361.

P. 526. A list of the fishes known from the Pacific coast of tropical America, from the Tropic of Cancer to Panama. By David S. Jordan.
pp. 361–394.

P. 527. Note on some Linnæan names of American fishes. By David S. Jordan.
pp. 394–396.

P. 528. On a collection of Medusæ made by the United States Fish Commission steamer *Albatross* in the Caribbean Sea and Gulf of Mexico. By J. Walter Fewkes.
pp. 397–402, 1 plate.

P. 529. Description of *Hesperomys trucí*, a new species belonging to the subfamily Murinæ. By R. W. Shufeldt.
pp. 403–408, 1 plate.

P. 530. Notes on some apparently preoccupied ornithological generic names. By Leonhard Stejneger.
pp. 409–410.

P. 531. The Chaclacayo trephined skull. By Otis T. Mason.
pp. 410–412, 1 plate.

P. 532. On the parasites of the Hessian fly. By C. V. Riley.
pp. 413–422, 1 plate.

P. 533. Description of *Leptophidium cervinum* and *L. marmoratum*, new fishes from deep water off the Atlantic and Gulf coasts. By G. Brown Goode and Tarleton H. Bean.
pp. 422–424.

P. 534. Notice of recent additions to the marine invertebrata of the northeastern coast of America, with descriptions of new genera and species and critical remarks on others. Part V. Annelida, Echinodermata, Hydroida, Tunicata. By A. E. Verrill.
pp. 424–448.

P. 535. Report on the flora of western and southern Texas. By V. Havard.
pp. 449–533, 1 fig.

P. 536. Notes on the mollusks of the vicinity of San Diego, California, and Todos Santos Bay, Lower California. By Charles R. Orcutt and William H. Dall.
pp. 534–552, 1 plate.

P. 537. Notes on a collection of fishes from Florida, with descriptions of new or little known species. By O. P. Hay.
pp. 552–559.

P. 538. Description of an apparently new species of *Dromococcyx* from British Guiana. By Robert Ridgway.
p. 559.

P. 539. Catalogue of a collection of birds made on the island of Cozumel, Yucatan, by the naturalists of the U. S. Fish Commission steamer *Albatross*, Capt. Z. L. Tanner, commander. By Robert Ridgway.
pp. 560–583.

P. 540. Contributions to the history of the Commander Islands. No. 5 Description of a new species of *Mesoplodon*, *M. stejnegeri*, obtained by Dr. Leonhard Stejneger in Bering Island. By Frederick W. True.
pp. 584–585, 1 plate.

P. 541. A note upon the *Hyperoodon semijunctus* of Cope. By Frederick W. True.
pp. 585–586.

P. 542. Fresh-water sponges from Mexico. By Edward Potts.
pp. 587–589, 1 fig.

P. 543. Descriptions of new fishes obtained by the United States Fish Commission mainly from deep water off the Atlantic and Gulf coasts. By G. Brown Goode and Tarleton H. Bean.
pp. 589–605.

P. 544. Report upon the echini collected by the U. S. Fish Commission steamer *Albatross* in the Gulf of Mexico from January to March, 1885. By Richard Rathbun.
pp. 606–620.

P. 545. List of a few species of birds new to the fauna of Guadeloupe, West Indies, with a description of a new species of *Ceryle*. By George N. Lawrence.
pp. 621–625.

P. 546. Remarks upon the plumage of *Regulus calendula*. By Charles Wickliffe Beckham.
pp. 625–628.

P. 547. Notice of a collection of stalked crinoids made by the steamer *Albatross* in the Gulf of Mexico and Caribbean Sea, 1884 and 1885. By Richard Rathbun.
pp. 628–635.

P. 548. Notes on the Great dolphin, *Coryphæna hippurus* Linné. By Silas Stearns.
pp. 635–636.

VOLUME IX, CONTAINING PAPERS 549–598.

Department of the Interior: | U. S. National Museum. | —— | Proceedings | of the | United States National Museum. | Vol. IX. | 1886. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1887.
8vo., pp. viii, 1–714, 25 pls., 6 figs.

P. 549. List of fishes collected in Arkansas, Indian Territory, and Texas, in September, 1884, with notes and descriptions. By David S. Jordan and Charles H. Gilbert.
pp. 1–25.

P. 550. Notes on fishes collected at Beaufort, North Carolina, with a revised list of the species known from that locality. By David S. Jordan.
pp. 25–30.

P. 551. List of fishes collected at Havana, Cuba, in December, 1883, with notes and descriptions. By David S. Jordan.
pp. 31–55.

P. 552. A review of the genera and species of Julidinæ found in American waters. By David S. Jordan and Elizabeth G. Hughes.
pp. 56–70.

P. 553. On the value of the fin-rays and their characteristics of development in the classification of the fishes, together with remarks on the theory on degeneration. By John A. Ryder.
pp. 71–82, 1 fig.

P. 554. On fulgurites. By George P. Merrill.
pp. 83–91, 1 plate.

P. 555. Descriptions of some new species of birds, supposed to be from the interior of Venezuela. By Robert Ridgway.
pp. 92–94.

P. 556. On *Æstrelata sandwichensis* Ridgw. By Robert Ridgway.
pp. 95–96.

P. 557. Descriptions of a new genus and species of mole, *Dymecodon pilirostris*, from Japan. By Frederick W. True.
pp. 97–98.

P. 558. Review of Japanese birds. 1. The woodpeckers. By Leonhard Stejneger.
pp. 99–124, 1 plate.

P. 559. Catalogue of animals collected by the Geographical and Exploring Commission of the Republic of Mexico. By Fernando Ferrari–Perez.
pp. 125–199.

P. 560. The British marsh-tit. By Leonhard Stejneger.
pp. 200–201.

P. 561. Report on the mollusks collected by L. M. Turner at Ungava Bay, North Labrador, and from the adjacent Arctic seas. By William H. Dall.
pp. 202–208, 1 plate.

P. 562. Contributions to the natural history of the Commander Islands. No. 6. Report on Bering Sea Island mollusca, collected by Mr. Nicholas Grebnitzki. By William H. Dall.
pp. 209–219.

P. 563. On the occurrence of a new species of *Rhinoptera* (*R. encenadæ*) in Todos Santos Bay, Lower California. By Rosa Smith.
p. 220.

P. 564. An annotated list of the mammals collected by the late Charles L. McKay in the vicinity of Bristol Bay, Alaska. By Frederick W. True.
pp. 221–224.

P. 565. Notes on some fishes collected at Pensacola by Mr. Silas Stearns, with a description of one new species (*Chætodon aya*). By David S. Jordan.
pp. 225–229.

P. 566. A review of the American species of Tetraodontidæ. By David S. Jordan and Charles L. Edwards.
pp. 230–247.

P. 567. Description of a melanistic specimen of *Buteo latissimus* Wils. By Robert Ridgway.
pp. 248–249.

P. 568. Supplement to the list of mesozoic and cenozoic invertebrate types in the collections of the National Museum. By John Belknap Marcou.
pp. 250–254.

P. 569. Catalogue of the collection of recent echini in the United States National Museum. (Corrected to July 1, 1886.) By Richard Rathbun.
pp. 255–293.

P. 570. Notes on species of the Australian genus *Pardalotus*. By Leonhard Stejneger.
pp. 294–296.

P. 571. Supplementary notes on some species of mollusks of the Behring Sea and vicinity. By William H. Dall.
pp. 297–309, 1 plate.

P. 572. Descriptions of parasitic copepoda belonging to the genera *Pandarus* and *Chondracanthus*. By Richard Rathbun.
pp. 310–324, 7 pls., 1 fig.

P. 573. Description of a recently new oyster-catcher (*Hæmatopus galapagensis*), from the Galapagos Islands. By Robert Ridgway.
pp. 325–326.

P. 574. A review of the species of the genus *Prionotus*. By David S. Jordan and Elizabeth G. Hughes.
pp. 327–338.

P. 575. A review of the American species of Belonidæ. By David S. Jordan and Morton W. Fordice.
pp. 339–361.

P. 576. Description of *Rallus jouyi*, with remarks on *Rallus striatus* and *Rallus gularis*. By Leonhard Stejneger.
pp. 362–364.

P. 577. On *Turdus alpestris* and *Turdus torquatus*, two distinct species of European thrushes. By Leonhard Stejneger.
pp. 365–373.

P. 578. Review of Japanese birds. II. Tits and nuthatches. By Leonhard Stejneger.
pp. 374–394, 1 fig.

P. 579. Review of Japanese birds. III. Rails, gallinules, and coots. By Leonhard Stejneger.
pp. 395–408.

P. 580. A new study of the genus *Dipodomys*. By Frederick W. True.
pp. 409–413.

P. 581. A revision of the lepidopterous family Saturniidæ. By John B. Smith.
pp. 414–437, 3 pls.

P. 582. Analyses of the cinchona barks on exhibition in the Materia Medica section, U. S. National Museum. By George E. Doering.
pp. 438–442.

P. 583. Norsk naval architecture. By George H. Boehmer.
pp. 443–459, 5 pls., 1 fig.

P. 584. A new land shell from California, with note on *Selenites duranti* Newcomb. By William G. Mazyck.
pp. 460–461, 2 figs.

P. 585. Notes on a collection of fishes from the Escambia River, with description of a new species of *Zygonectes* (*Zygonectes escambiæ*). By Charles H. Bollman.
pp. 462–465.

P. 586. Description of six new species of fishes from the Gulf of Mexico, with notes on other species. By David S. Jordan and Barton W. Evermann.
pp. 466–476.

P. 587. A review of the Gobiidæ of North America. By David S. Jordan and Carl H. Eigenmann.
pp. 477–518.

P. 588. Description of a new subspecies of *Cyclorhis* from Yucatan. By Robert Ridgway.
p. 519.

P. 589. Description of a new species of *Myiarchus*, presumably from the Orinoco district of South America. By Robert Ridgway.
p. 520.

P. 590. On a probable hybrid between *Dryobates nuttallii* Gamb. and *D. pubescens gairdnerii* Aud. By Robert Ridgway.
pp. 521–522.

P. 591. Description of an apparently new species of *Picolaptes*, from the Lower Amazon. By Robert Ridgway.
p. 523.

P. 592. On the status of *Synthliboramphus wumizusume* as a North American bird. By Leonhard Stejneger.
p. 524.

P. 593. Notes on typical specimens of fishes described by Cuvier and Valenciennes and preserved in the Museé d'Histoire Naturelle in Paris. By David S. Jordan.
pp. 525–546.

P. 594. Descriptions of ten species and one new genus of annelids from the dredgings of the U. S. Fish Commission steamer *Albatross*. By James E. Benedict.
pp. 547–553, 6 pls.

P. 595. A preliminary list of the fishes of the West Indies. By David S. Jordan.
pp. 554–608.

P. 596. A catalogue of the birds of Grenada, West Indies, with observations thereon. [Edited by George N. Lawrence.] By John Grant Wells.
pp. 609–633.

P. 597. On a collection of birds made by Mr. M. Namiye, in the Liu-Kiu Islands, Japan, with descriptions of new species. By Leonhard Stejneger.
pp. 634–651.

P. 598. Water-birds of Japan. By T. W. Blakiston.
pp. 652–660.

VOLUME X, CONTAINING PAPERS 599–675.)

Department of the Interior: | U. S. National Museum. | —— | Proceedings | of the | United States National Museum. | Vol. X. | 1887. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1888.
8vo., pp. viii, 1–771, 39 pls.,[1] 11 figs.

P. 599. Description of a new species of *Cotinga* from the Pacific coast of Costa Rica. By Robert Ridgway.
pp. 1–2.

P. 600. Description of a new form of *Spindalis* from the Bahamas. By Robert Ridgway.
p. 3.

P. 601. Review of Japanese birds. IV. Synopsis of the genus *Turdus*. By Leonhard Stejneger.
pp. 4–5.

P. 602. Description of a new species of bat, *Vespertilio longicrus*, from Puget Sound. By Frederick W. True.
pp. 6–7.

P. 603. Some distinctive cranial characters of the Canada lynx. By Frederick W. True.
pp. 8–9.

P. 604. Catalogue of the species of corals belonging to the genus *Madrepora*, contained in the United States National Museum. By Richard Rathbun.
pp. 10–19.

P. 605. Description of the adult female of *Carpodectes antoniæ* Zeledon; with critical remarks, notes on habits, etc., by José C. Zeledon. By Robert Ridgway.
p. 20.

---

[1] Including circular 37.

P. 606. List of recently identified fossil plants belonging to the United States National Museum, with descriptions of several new species. [Compiled and prepared for publication by F. H. Knowlton.] By Leo Lesquereux.
pp. 21–46, 4 pls.

P. 607. Descriptions of new and little known etheostomoids. By Charles H. Gilbert.
pp. 47–64.

P. 608. A review of the North American species of the genera *Lagodon*, *Archosargus*, and *Diplodus*. By Carl H. Eigenmann and Elizabeth G. Hughes.
pp. 65–74.

P. 609. Birds of Kauai Island, Hawaiian Archipelago, collected by Mr. Valdemar Knudsen, with descriptions of new species. By Leonhard Stejneger.
pp. 75–102, 1 plate.

P. 610. Notes on the Northern palæarctic bullfinches. By Leonhard Stejneger.
pp. 103–110.

P. 611. Description of a new species of *Porzana* from Costa Rica. By Robert Ridgway.
p. 111.

P. 612. Notes on *Ardea wuerdemanni* Baird. By Robert Ridgway.
pp. 112–115.

P. 613. Description of a new species of *Ophichthys* (*Ophichthys retropinnis*), from Pensacola, Florida. By Carl H. Eigenmann.
p. 116.

P. 614. Contributions to the natural history of the Commander Islands. No. 7. Revised and annotated catalogue of the birds inhabiting the Commander Islands. By Leonhard Stejneger.
pp. 117–145, 3 pls.

P. 615. On a new species of *Tropidonotus* found in Washington. By E. D. Cope.
p. 146.

P. 616. *Trogon ambiguus* breeding in Arizona. By Robert Ridgway.
p. 147.

P. 617. Description of a new plumed partridge from Sonora. By Robert Ridgway.
pp. 148–150.

P. 618. Description of a new genus of dendrocolaptine bird from the Lower Amazon. By Robert Ridgway.
p. 151.

P. 619. Description of a new species of *Phacellodomus* from Venezuela. By Robert Ridgway.
p. 152.

P. 620. Contributions to the natural history of the Commander Islands. No. 8. Description of *Alopecurus stejnegeri*, a new species of grass from the Commander Islands. By George Vasey.
p. 153.

P. 621. Contributions to the natural history of the Commander Islands. No. 9. On the entomostraca collected by Mr. Leonhard Stejneger, on Bering Island, 1882–83. By W. Lilljeborg.
pp. 154–156.

P. 622. Notes on the osteology of the spotted tinamou (*Nothura maculosa*). By Frederic A. Lucas.
pp. 157–158, 2 figs.

P. 623. Field-notes on the mammals, birds, and reptiles of northern California. By Charles H. Townsend.
pp. 159–241, 1 plate, 4 figs.

P. 624. A contribution to the knowledge of the fishes of Kansas. By O. P. Hay.
pp. 242–253.

P. 625. Notes on the North American Lithobiidæ and Scutigeridæ. By Charles H. Bollman.
pp. 254–266.

P. 626. Description of two new species of Kaup's genus *Megascops*. By Robert Ridgway.
pp. 267–268.

P. 627. Notes on a collection of fishes sent by Mr. Charles C. Leslie from Charleston, South Carolina. By David S. Jordan and Carl H. Eigenmann.
pp. 269–270.

P. 628. Review of Japanese birds. V. Ibises, storks, and herons. By Leonhard Stejneger.
pp. 271–319, 1 plate.

P. 629. On the systematic name of the Kamtschatkan and Japanese carrion crow. By Leonhard Stejneger.
pp. 320–321.

P. 630. Note on *Polynemus californiensis* of Thominot. By David S. Jordan.
p. 322.

P. 631. List of the myriapods found in Escambia County, Florida, with descriptions of six new species. By Jerome McNeill.
pp. 323–327, 1 plate.

P. 632. Descriptions of twelve new species of myriapoda, chiefly from Indiana. By Jerome McNeill.
pp. 328–334, 1 plate.

P. 633. The species of *Euerythra* Harv. By John B. Smith.
pp. 335–337, 1 plate.

P. 634. The North American species of *Callimorpha* Latr. By John B. Smith.
pp. 338–353, 1 plate.

P. 635. Annotated catalogue of the species of *Porites* and *Synaræa* in the United States National Museum, with a description of a new species of *Porites*. By Richard Rathbun.
pp. 354–366, 5 pls.

P. 636. Notes on a trematode from the white of a newly laid hen's egg. By Edwin Linton.
pp. 367–369, 1 fig.

P. 637. Descriptions of five new species of fishes sent by Prof. A. Dugès from the province of Guanajuato, Mexico. By Tarleton H. Bean.
pp. 370–375, 1 plate.

P. 638. On a collection of birds' sterna and skulls, collected by Dr. Thomas H. Streets, U. S. Navy. By R. W. Shufeldt.
pp. 376–387, 4 figs.

P. 639. Description of a new species of *Thalassophryne* (*Thalassophryne dowi*) from Punta Arenas and Panama. By David S. Jordan and Charles H. Gilbert.
p. 388.

P. 640. Notes on *Psittirostra psittacea* from Kauai, Hawaiian Islands. By Leonhard Stejneger.
pp. 389–390.

P. 641. Further contributions to the avifauna of the Liu-Kiu Islands, Japan, with descriptions of new species. By Leonhard Stejneger.
pp. 391–415, 1 plate.

P. 642. Review of Japanese birds. VI. The pigeons. By Leonhard Stejneger.
pp. 416–429, 1 plate.

P. 643. Description of a new *Muscisaxicola*, from Lake Titicaca, Peru. By Robert Ridgway.
p. 430.

P. 644. On *Phrygilus gayi* (Eyd. and Gerv.) and allied species. By Robert Ridgway.
pp. 431–435.

P. 645. List of the batrachia and reptilia of the Bahama Islands. By E. D. Cope.
pp. 436–439.

P. 646. Descriptions of the species of *Heliaster* (a genus of star-fishes), represented in the U. S. National Museum. By Richard Rathbun.
pp. 440–449, 4 pls.

P. 647. New genera and species of North American Noctuidæ. By John B. Smith.
pp. 450–479.

P. 648. Note on the "Analyse de la nature" of Rafinesque. By David S. Jordan.
pp. 480–481.

P. 649. On a collection of birds made by Mr. M. Namiye, in the islands of Idzu, Japan. By Leonhard Stejneger.
pp. 482–487.

P. 650. A review of the genus *Dendrocincla* Gray. By Robert Ridgway.
pp. 488–497.

P. 651. Descriptions of two new species of the genus *Unio*, from the Ozark region of Missouri. By R. Ellsworth Call.
pp. 498–500, 2 pls.

P. 652. Description of a new species of *Callionymus* (*Callionymus bairdi*), from the Gulf of Mexico. By David S. Jordan.
pp. 501–502.

P. 653. Description of a new species of bird of the genus *Catharus*, from Ecuador. By George N. Lawrence.
p. 503.

P. 654. Remarks on *Catharus berlepschi* Lawr. By Robert Ridgway.
p. 504.

P. 655. Descriptions of some new species and subspecies of birds from Middle America. By Robert Ridgway.
pp. 505–510.

P. 656. Note on the generic name *Uropsila* Sel. and Salv. By Robert Ridgway.
p. 511.

P. 657. Notes on a young red snapper (*Lutjanus blackfordi*) from Great South Bay, Long Island. By Tarleton H. Bean.
p. 512.

P. 658. Description of a new species of *Thyrsitops* (*T. violaceus*), from the fishing banks off the New England coast. By Tarleton H. Bean.
pp. 513–514.

P. 659. A note on *Vesperugo hesperus* Allen. By Frederick W. True.
p. 515.

P. 660. Descriptions of new species and genera of birds from the Lower Amazon. By Robert Ridgway.
pp. 516–528.

P. 661. A review of the genus *Psittacula* of Brisson. By Robert Ridgway.
pp. 529–548.

P. 662. Description of the nest and eggs of the California black-capped gnat-catcher (*Polioptila californica* Brewster). By Charles E. Bendire.
pp. 549–550.

P. 663. Notes on a collection of birds' nests and eggs from southern Arizona Territory. By Charles E. Bendire.
pp. 551–558.

P. 664. Descriptions of new species of parasitic copepods, belonging to the genera *Trebius*, *Perissopus*, and *Lernanthropus*. By Richard Rathbun.
pp. 559–571, 7 pls.

P. 665. Catalogue of a collection of birds made by Mr. Chas. H. Townsend, on islands in the Caribbean Sea and in Honduras. By Robert Ridgway.
pp. 572–597.

P. 666. The meteoric iron which fell in Johnson County, Arkansas, 3.17 p. m., March 27, 1886. By George F. Kunz.
pp. 598–605, 3 pls., 2 figs.

P. 667. Review of Japanese birds. VII. The creepers. By Leonhard Stejneger.
pp. 606–611.

P. 668. The characteristics of the elacatids. By Theodore Gill.
pp. 612–614, 1 plate.

P. 669. Note on *Gramma loreto* of Poey. By Theodore Gill.
pp. 615–616.

P. 670. Descriptions of fourteen new species of North American myriapods. By Charles H. Bollman.
pp. 617–627.

P. 671. Description of a supposed new species of char (*Salvelinus aureolus*), from Sunapee Lake, New Hampshire. By Tarleton H. Bean.
pp. 628–630.

P. 672. Description of a new genus and species of fish, *Acrotus willoughbyi*, from Washington Territory. By Tarleton H. Bean.
pp. 631–632.

P. 673. Observations on the birds of southwestern Texas. By Charles Wickliffe Beckham.
pp. 633–696.

P. 674. Description of a new *Psaltriparus* from southern Arizona. By Robert Ridgway.
p. 697.

P. 675. Description of a new species of *Xyrichthys* (*Xyrichthys jessiæ*) from the Gulf of Mexico. By David S. Jordan.
p. 698.

VOLUME XI, CONTAINING PAPERS 676–760.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XI. | 1888. | —— | Washington: | Government Printing Office. | 1889.
8vo., pp. xi, 1–703, 60 pls., 137 figs.

P. 676. New species of fossil wood (*Araucarioxylon arizonicum*) from Arizona and New Mexico. By F. H. Knowlton.
pp. 1–4, 1 plate.

P. 677. Description of two new species of fossil coniferous wood from Iowa and Montana. By F. H. Knowlton.
pp. 5–8, 2 pls.

P. 678. Description of *Storeria dekayi*, var. *anomola*. By A. Dugès.
pp. 9–10, 1 fig.

P. 679. Recent determinations of fossil plants from Kentucky, Louisiana, Oregon, California, Alaska, Greenland, etc. with, descriptions of new species. [Compil d and prepared for publication by F. H. Knowlton.] By Leo Lesquereux.
pp. 11–38, 13 pls.

P. 680. The paleontologic history of the genus *Platanus*. By Lester F. Ward.
pp. 39–42, 6 pls.

P. 681. Notes on Indiana fishes. By Barton W. Evermann and Oliver P. Jenkins.
pp. 43–57.

P. 682. On the occurrence of the Great Lake trout (*Salvelinus namaycush*) in the waters of British Columbia. By David S. Jordan.
p. 58.

P. 683. The Navajo tanner. By R. W. Shufeldt.
pp. 59–66, 6 pls.

P. 684. Note on the genus *Dipterodon*. By Theodore Gill.
pp. 67–68.

P. 685. Note on the genus *Gobiomorus*. By Theodore Gill.
pp. 69–70.

P. 686. Notes on European marsh-tits, with description of a new subspecies from Norway. By Leonhard Stejneger.
pp. 71–76.

P. 687. Hampe's method of determining Cu_2O in metallic copper. By Fred. P. Dewey.
pp. 77–82.

P. 688. List of fossil plants collected by Mr. I. C. Russell at Black Creek, near Gadsden, Alabama, with descriptions of several new species. By Leo Lesquereux.
pp. 83–87, 1 plate.

P. 689. On a new species of *Charina* from California. By E. D. Cope.
p. 88, 1 plate.

P. 690. Description of two species of *Palmoxylon*—one new—from Louisiana. By F. H. Knowlton.
pp. 89–91, 1 plate.

P. 691. Description of a new western subspecies of *Accipiter velox* Wils., and subspecific diagnosis of *A. cooperi mexicanus* Swains. By Robert Ridgway.
p. 92.

P. 692. Further contributions to the Hawaiian avifauna. By Leonhard Stejneger.
pp. 93–103.

P. 693. Note on *Æstrelata sandwichensis* Ridgw. By Robert Ridgway.
p. 104.

P. 694. On the serpentine of Montville, New Jersey. By George P. Merrill.
pp. 105–111, 2 pls.

P. 695. Notes on the European crested titmice. By Leonhard Stejneger.
pp. 113–114.

P. 696. On nephrite and jadeite. By F. W. Clarke and George P. Merrill.
pp. 115–130, 1 plate.

P. 697. The Navajo shoemaker. By Alexander M. Stephen.
pp. 131–136, 7 figs.

P. 698. Description of eighteen new species of fishes from the Gulf of California. By Oliver P. Jenkins and Barton W. Evermann.
pp. 137–158.

P. 699. Description of *Geomys personatus* and *Dipodomys compactus*, two new species of rodents from Padre Island, Texas. By Frederick W. True.
pp. 159–160.

P. 700. On the San Emigdio meteorite. By George P. Merrill.
pp. 161–167, 1 plate.

P. 701. Diagnosis of the Kamtschatkan three-toed woodpecker (*Picoides albidior*). By Leonhard Stejneger.
p. 168.

P. 702. A remarkable Eskimo harpoon from East Greenland. By John Murdoch.
pp. 169–171, 3 figs.

P. 703. The corrugation in African sword blades and other weapons. By Walter Hough.
p. 172.

P. 704. Notes on the osteology of the thrushes, Miminæ, and wrens. By Frederic A. Lucas.
pp. 173–180, 1 plate, 7 figs.

P. 705. An Eskimo strike-a-light from Cape Bathurst. By Walter Hough.
pp. 181–184, 6 figs.

P. 706. Notes on *Cydosia* and *Cerathosia*. By John B. Smith.
pp. 185–190, 2 figs.

P. 707. On a peridotite from Little Deer Isle, in Penobscot Bay, Maine. By George P. Merrill.
pp. 191–195, 1 plate, 1 fig.

P. 708. Description of the adult male of *Acanthidops bairdi*. By Robert Ridgway.
p. 196.

P. 709. The houses of the Kwakiutl Indians, British Columbia. By Franz Boas.
pp. 197–213, 3 pls., 21 figs.

P. 710. Description of a new species of *Hyalina*. By William H. Dall.
p. 214, 3 figs.

P. 711. Observations upon the osteology of the North American Anseres. By R. W. Shufeldt.
pp. 215–251, 30 figs.

P. 712. On the proper name of the genus *Labrax* of Cuvier. By Theodore Gill.
p. 252.

P. 713. Observations upon the osteology of the order Tubinares and Steganopodes. By R. W. Shufeldt.
pp. 253–315, 13 figs.

P. 714. Description of a new species of insect, *Fontaria pulchella*, from Strawberry Plains, Jefferson County, Tennessee. By Charles H. Bollman.
p. 316.

P. 715. On a new species of *Bufo* from Texas. By E. D. Cope.
pp. 317–318.

P. 716. On the proper generic name of the tunny and albicore. By Theodore Gill.
pp. 319–320.

P. 717. On the Psychrolutidæ of Günther. By Theodore Gill.
pp. 321–327, 1 plate.

P. 718. Ethnology of the Coast Indian tribes of Alaska. By A. P. Niblack.
p. 328.

P. 719. List of fishes collected by Alphonse Forrer about Mazatlan, with descriptions of two new species, *Heros beani* and *Pœcilia butleri*. By David S. Jordan.
pp. 329–334.

P. 720. Notes on a collection of myriapoda from Cuba. By Charles H. Bollman.
p. 335–338.

P. 721. Notes on a collection of myriapoda from Mossy Creek, Tennessee, with a description of a new species. By Charles H. Bollman.
pp. 339–342.

P. 722. Notes upon some myriapods belonging to the U. S. National Museum. By Charles H. Bollman.
pp. 343–350.

P. 723. Descriptions of fourteen species of fresh-water fishes collected by the U. S. Fish Commission in the summer of 1888. By David S. Jordan.
pp. 351–362, 3 pls.

P. 724. A study of the boomerang. By H. Eggers.
pp. 363–367, 3 figs.

P. 725. List of plants from Lower California sent to the Smithsonian Institution by Lieut. Charles F. Pond, U. S. Navy. By George Vasey.
p. 368.

P. 726. A study of the American species of *Vertigo* contained in the U. S. National Museum, with the description of a new subgenus of Pupidæ. By V. Sterki.
pp. 369–380, 1 plate, 6 figs.

P. 727. On the snakes of Florida. By E. D. Cope.
pp. 381–394, 1 plate.

P. 728. Catalogue of batrachia and reptilia brought by William Taylor from San Diego, Texas. By E. D. Cope.
pp. 395–398, 1 plate.

P. 729. On the Eutæniæ of southeastern Indiana. By E. D. Cope.
pp. 399–401, 1 plate.

P. 730. The stone age at Mount Vernon. By Otis T. Mason.
p. 402.

P. 731. Catalogue of the myriapods of Indiana. By Charles H. Bollman.
pp. 403–410.

P. 732. List of fishes now in the U. S. National Museum, collected in Nicaragua by Dr. Louis F. H. Birt. By David S. Jordan.
pp. 411–412.

P. 733. Notes on some albino birds presented to the U. S. National Museum, with some remarks on albinism. By Wirt Robinson.
pp. 413–416.

P. 734. Description of a new species of deer, *Cariacus clavatus*, from Central America. By Frederick W. True.
pp. 417–424.

P. 735. Review of Japanese birds. VIII. The nutcracker (*Nucifraga caryocatactes macrorhynchos*). By Leonhard Stejneger.
pp. 425–432.

P. 736. The single-headed drum of the Naskopie (Nagnagnot) Indians, Ungava district, Hudson Bay territory. By Lucien M. Turner.
pp. 433–434.

P. 737. Notes on a collection of fishes from the Maumee Valley, Ohio. By Seth E. Meek.
pp. 435–440.

P. 738. Description of new genera and species of fossils from the Middle Cambrian. By Charles D. Walcott.
pp. 441–446, 1 fig.

P. 739. A simple method of measuring the thickness of inclined strata. By Charles D. Walcott.
pp. 447–448, 1 fig.

P. 740. Notes on some Indian Territory land and fresh-water shells. By Charles T. Simpson.
pp. 449–454.

P. 741. Notes on *Hydrocotyle americana* L. By Theodor Holm.
pp. 455–462, 2 pls.

P. 742. Notes on some California fishes, with descriptions of two new species. By Carl H. Eigenmann and Rosa S. Eigenmann.
pp. 463–466.

P. 743. On the occurrence of *Echinomys semispinosus* Tomes, in Nicaragua. By Frederick W. True.
pp. 467–468.

P. 744. On the mammals collected in eastern Honduras in 1887 by Mr. Charles H. Townsend, with a description of a new subspecies of *Capromys* from Little Swan Island. By Frederick W. True.
pp. 469–472.

P. 745. The preparation of Japanese lacquer and the manufacture of Wakasa lacquer-ware. By Romyn Hitchcock.
pp. 473–479.

P. 746. A fossil lingula preserving the cast of the peduncle. By Charles D. Walcott.
p. 480, 3 figs.

P. 747. Notes on the species of *Lachnosterna* of temperate North America, with descriptions of new species. By John B. Smith.
pp. 481–525, 13 pls.

P. 748. Description of *Coregonus pusillus*, a new species of whitefish from Alaska. By Tarleton H. Bean.
p. 526.

P. 749. List of plants collected by Dr. Edward Palmer in Lower California in 1889. By George Vasey and Joseph N. Rose.
pp. 527–536.

P. 750. Notes on Costa Rican birds, with descriptions of seven new species and subspecies and one new genus. By Robert Ridgway.
pp. 537–546.

P. 751. Review of Japanese birds. IX. The wrens. By Leonhard Stejneger.
pp. 547–548.

P. 752. List of fishes collected at Green Turtle Cay, in the Bahamas, by Charles L. Edwards, with descriptions of three new species. By David S. Jordan and Charles H. Bollman.
pp. 549–553.

P. 753. Description of a new species of *Bathymaster* (*B. jordani*), from Puget's Sound and Alaska. By Charles H. Gilbert.
p. 554.

P. 754. Notes on a collection of fishes obtained in the Gila River, at Fort Thomas, Arizona, by Lieut. W. L. Carpenter, U. S. Army. By Philip H. Kirsch.
pp. 555–558.

P. 755. Notes on some neotropical birds belonging to the United States National Museum. By Hans von Berlepsch.
pp. 559–566.

P. 756. On the classification of the mail-cheeked fishes. By Theodore Gill.
pp. 567–592.

P. 757. Gleanings among the Pleuronectids, and observations on the name *Pleuronectes*. By Theodore Gill.
pp. 593–606.

P. 758. Note on the genus *Spheroides*. By Theodore Gill.
pp. 607–608.

P. 759. A list of fishes from a small tributary of the Poteau River, Scott County, Arkansas. By Charles H. Gilbert.
pp. 609–610.

P. 760. Descriptions of new Braconidæ in the collection of the U. S. National Museum. By William H. Ashmead.
pp. 611–671.

VOLUME XII, CONTAINING PAPERS 761–789.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XII. | 1889. | —— | Washington: | Government Printing Office. | 1890.
8vo., pp. viii, 1–686, 23 pls., 14 figs.

P. 761. A review of the genus *Xiphocolaptes* of Lesson. By Robert Ridgway.
pp. 1–20.

P. 762. A review of the genus *Sclerurus* of Swainson. By Robert Ridgway.
pp. 21–31.

P. 763. Descriptive notes of new genera and species from the Lower Cambrian or *Olenellus* zone of North America. By Charles D. Walcott.
pp. 33–46.

P. 764. New North American Acrididæ, found north of the Mexican boundary. By Lawrence Bruner.
pp. 47–82, 1 plate.

P. 765. Contributions to the natural history of the Commander Islands.
A. Contributions to the history of Pallas' cormorant. By Leonhard Stejneger.
B. Description of some bones of Pallas' cormorant, *Phalacrocoraxperspicillatus*. By Frederic A. Lucas.
pp. 83–94, 3 pls.

P. 766. Description of two new species of snakes from California. By Leonhard Stejneger.
pp. 95–99, 3 figs.

P. 767. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. I. Birds collected on the Galapagos Islands in 1888. By Robert Ridgway.
pp. 101–128, 6 figs.

P. 768. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. II. Birds collected on the island of Santa Lucia, West Indies, the Abrolhos Islands, Brazil, and at the Straits of Magellan, in 1887–88. By Robert Ridgway.
pp. 129–139.

P. 769. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. III. Report on the batrachians and reptiles collected in 1887–88. By E. D. Cope.
pp. 141–147.

P. 770. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. IV. Descriptions of new species of fishes collected at the Galapagos Islands and along the coast of the United States of Colombia, 1887–88. By David S. Jordan and Charles H. Bollman.
pp. 149–183.

P. 771. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. V. Annotated catalogue of the insects collected in 1887–88. By L. O. Howard.
pp. 185–216.

P. 772. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VI. List of the plants collected in Alaska in 1888. By George Vasey.
pp. 217–218.

P. 773. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VII. Preliminary report on the collection of mollusca and brachiopoda obtained in 1887–88. By William H. Dall.
pp. 219–362, 10 pls.

P. 774. Notes on the occurrence of *Gillichthys y-cauda* at San Diego, California. By Charles H. Gilbert.
p. 363.

P. 775. Description of a new genus and species of inarticulate brachiopod from the Trenton limestone. By Charles D. Walcott.
pp. 365–366, 4 figs.

P. 776. The archæology of the Potomac tide-water region. By Otis T. Mason.
pp. 367–370, 5 pls.

P. 777. The palæolithic period in the District of Columbia. By Thomas Wilson.
pp. 371–376, 2 pls.

P. 778. Notes on a third collection of birds made in Kauai, Hawaiian Islands, by Valdemar Knudsen. By Leonhard Stejneger.
pp. 377–386.

P. 779. Descriptions of new Ichneumonidæ in the collection of the U. S. National Museum. By William H. Ashmead.
pp. 387–451.

P. 780. Description of the yellow-finned trout of Twin Lakes, Colorado. By David S. Jordan and Barton W. Evermann.
pp. 453–454.

P. 781. Contributions toward a monograph of the Noctuidæ of temperate North America. Revision of some tæniocampid genera. By John B. Smith.
pp. 455–496, 2 pls.

P. 782. Catalogue of the described Araneæ of temperate North America. By George Marx.
pp. 497–594.

P. 783. Notes on the serpentinous rocks of Essex County, New York; from Aqueduct shaft 26, New York City; and from near Easton, Pennsylvania. By George P. Merrill.
pp. 595–600.

P. 784. A revision of the genus *Araucarioxylon* of Kraus, with compiled descriptions and partial synonymy of the species. By F. H. Knowlton.
pp. 601–617.

P. 785. Notes on North American crayfishes—family Astacidæ. By Walter Faxon.
pp. 619–634.

P. 786. Description of two new species of bats—*Nyctinomus europs* and *N. orthotis*. By Harrison Allen.
pp. 635–640.

P. 787. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. VIII. Description of a new cottoid fish from British Columbia. By Tarleton H. Bean.
pp. 641–642.

P. 788. Description of a new lizard from Lower California. By Leonhard Stejneger.
pp. 643–644.

P. 789. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. IX. Catalogue of fishes collected at Port Castries, St. Lucia, by the steamer *Albatross*, November, 1888. By David S. Jordan.
pp. 645–652.

VOLUME XIII, CONTAINING PAPERS 790-841.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XIII. | 1890. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1891.

8vo., pp. viii, 1-665, 38 pls., 12 figs.

P. 790. Description of a new species of land shell from Cuba—*Vertigo cubana*. By William H. Dall.
pp. 1-2, 2 figs.

P. 791. Description of a new species of fish from Tippecanoe River, Indiana. By David S. Jordan and Barton W. Evermann.
pp. 3-4, 1 fig.

P. 792. Remarks on some fossil remains considered as peculiar kinds of marine plants. By Leo Lesquereux.
pp. 5-12, 1 plate.

P. 793. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. X. On certain mesozoic fossils from the islands of Saint Paul's and Saint Peter's, in the Straits of Magellan. By Charles A. White.
pp. 13-14, 2 pls.

P. 794. Notes on the leaves of *Liriodendron*. By Theodor Holm.
pp. 15-35, 6 pls.

P. 795. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XI. New fishes collected off the coast of Alaska and the adjacent region southward. By Tarleton H. Bean.
pp. 37-45.

P. 796. Further notes on the genus *Xiphocolaptes* of Lesson. By Robert Ridgway.
pp. 47-48.

P. 797. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XII. A preliminary report on the fishes collected by the steamer *Albatross* on the Pacific coast of North America during the year 1889, with descriptions of twelve new genera and ninety-two new species. By Charles H. Gilbert.
pp. 49-126.

P. 798. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XIII. Catalogue of skeletons of birds collected at the Abrolhos Islands, Brazil, the Straits of Magellan, and the Galapagos Islands, in 1887-88. By Frederic A. Lucas.
pp. 127-130.

P. 799. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XIV. Birds from the coasts of western North America and adjacent islands, collected in 1888–89, with descriptions of new species. By Charles H. Townsend.
pp. 131–142.

P. 800. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XV. Reptiles from Clarion and Socorro Islands and the Gulf of California, with description of a new species. By Charles H. Townsend.
pp. 143–144.

P. 801. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XVI. Plants collected in 1889 at Socorro and Clarion Islands, Pacific Ocean. By George Vasey and Joseph N. Rose.
pp. 145–149.

P. 802. On a new genus and species of colubrine snakes from North America. By Leonhard Stejneger.
pp. 151–155, 1 fig.

P. 803. The osteological characteristics of the family Anguillidæ. By Theodore Gill.
pp. 157–160.

P. 804. The osteological characteristics of the family Synaphobranchidæ. By Theodore Gill.
pp. 161–164.

P. 805. The osteological characteristics of the family Murænidæ. By Theodore Gill.
pp. 165–170.

P. 806. On the disappearance of the Dick cissel, *Spiza americana*, from the District of Columbia. By Hugh M. Smith.
pp. 171–172.

P. 807. Description of a new species of bat, *Atalapha semota*. By Harrison Allen.
pp. 173–175.

P. 808. On the snakes of the genus *Charina*. By Leonhard Stejneger.
pp. 177–182.

P. 809. On the North American lizards of the genus *Barissia* of Gray. By Leonhard Stejneger.
pp. 183–185.

P. 810. A collection of stone implements from the District of Columbia. By S. V. Proudfit.
pp. 187–194, 5 pls.

P. 811. Notes on the occurrence of a young crab-eater, *Elacate canada*, from the Lower Hudson Valley, New York. By A. K. Fisher.
p. 195.

P. 812. Observations on the life history of the bottlenose porpoise. By Frederick W. True.
pp. 197–203, 1 fig.

P. 813. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XVII. Descriptions of new west American land, fresh-water, and marine shells, with notes and comments. By Robert E. C. Stearns.
pp. 205–225, 3 pls.

P. 814. Description of two new species of mammals from Mt. Kilimanjaro, East Africa. By Frederick W. True.
pp. 227–229.

P. 815. Osteological characteristics of the family Murænesocidæ. By Theodore Gill.
pp. 231–234.

P. 816. On the family Ranicipitidæ. By Theodore Gill.
pp. 235–238, 1 plate.

P. 817. The osteological characteristics of the family Simenchelyidæ. By Theodore Gill.
p. 239–242.

P. 818. The characteristics of the Dactylopteroidea. By Theodore Gill.
pp. 243–248, 1 plate.

P. 819. Notes on the birds observed during the cruise of the United States Fish Commission schooner *Grampus* in the summer of 1887. By William Palmer.
pp. 249–265.

P. 820. Description of new forms of Upper Cambrian fossils. By Charles D. Walcott.
pp. 267–279, 2 pls.

P. 821. Notes on triassic plants from New Mexico. By William M. Fontaine and F. H. Knowlton.
pp. 281–285, 5 pls.

P. 822. Notes on fishes of the genera *Agosia*, *Algansea*, and *Zophendum*. By David S. Jordan.
pp. 287–288.

P. 823. Description of a new species of *Etheostoma* (*E. micropterus*) from Chihuahua, Mexico. By Charles H. Gilbert.
pp. 289–290.

P. 824. Description of a new species of bat of the genus *Carollia*, and remarks on *Carollia brevicauda*. By Harrison Allen.
pp. 291–298.

P. 825. Osteological characteristics of the family Amphipnoidæ. By Theodore Gill.
pp. 299–302.

P. 826. Description of a new species of mouse, *Phenacomys longicaudus*, from Oregon. By Frederick W. True.
pp. 303–304.

P. 827. Notes on the habits of the moose in the far north of British America in 1865. By J. G. Lockhart.
pp. 305–308.

P. 828. Observations on the Farallon rail (*Porzana jamaicensis coturniculus* Baird). By Robert Ridgway.
pp. 309–311.

P. 829. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XVIII. List of fishes obtained in the harbor of Bahia, Brazil, and in adjacent waters. By David S. Jordan.
pp. 313–336.

P. 830. Notes on the osteology of the Paridæ, *Sitta* and *Chamæa*. By Frederic A. Lucas.
pp. 337–345, 1 plate, 5 figs.

P. 831. Note on the Aspredinidæ. By Theodore Gill.
pp. 347–352.

P. 832. Note on the genus *Felichthys* of Swainson. By Theodore Gill.
pp. 353–354.

P. 833. The characteristics of the family of Scatophagoid fishes. By Theodore Gill.
pp. 355–360, 1 fig.

P. 834. On the relations of Cyclopteroidea. By Theodore Gill.
pp. 361–376, 3 pls.

P. 835. The osteological characteristics of the family Hemitripteridæ. By Theodore Gill.
pp. 377–380, 1 plate.

P. 836. Playing cards from Japan. By Mrs. J. King van Rensselaer.
pp. 381–382, 1 plate.

P. 837. Notes on North American myriapoda of the family Geophilidæ, with descriptions of three genera. By O. F. Cook and G. N. Collins.
pp. 383–396, 3 pls.

P. 838. Contributions toward a monograph of the Noctuidæ of temperate North America. Revision of *Homohadena* Grote. By John B. Smith.
pp. 397–405, 1 fig.

P. 839. Contributions toward a monograph of the Noctuidæ of temperate North America. Revision of the species of *Hadena* referable to *Xylophasia* and *Luperina*. By John B. Smith.
pp. 407–447, 2 pls.

P. 840. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XIX. A supplementary list of fishes collected at the Galapagos Islands and Panama, with descriptions of one new genus and three new species. By Charles H. Gilbert.
pp. 449–455.

P. 841. The birds of Manitoba. By Ernest E. Thompson.
pp. 457–643, 1 plate.

VOLUME XIV, CONTAINING PAPERS 842–886.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XIV. | 1891. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1892.

8vo., pp. vi, 1–750, 34 pls., 3 figs.

P. 842. A catalogue of the fresh-water fishes of South America. By Carl H. Eigenmann and Rosa S. Eigenmann.
pp. 1–81.

P. 843. Fishes collected by William P. Seal in Chesapeake Bay, at Cape Charles City, Virginia, September 16 to October 3, 1890. By Barton A. Bean.
pp. 83–94.

P. 844. List of North American land and fresh-water shells received from the U. S. Department of Agriculture, with notes and comments thereon. By Robert E. C. Stearns.
pp. 95–106.

P. 845. Relations of temperature to vertebræ among fishes. By David S. Jordan.
pp. 107–120.

P. 846. Report upon a collection of fishes made at Guaymas, Sonora, Mexico, with descriptions of new species. By Barton W. Evermann and Oliver P. Jenkins.
pp. 121–165, 2 pls.

P. 847. Description of a new genus and species of tailless batrachian from tropical America. By Leonhard Stejneger and Frederick C. Test.
pp. 167–168, 1 plate.

P. 848. On the structure of the tongue in humming birds. By Frederic A. Lucas.
pp. 169–172, 1 plate, 2 figs.

P. 849. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XX. On some new or interesting west American shells from the dredgings of the U. S. Fish Commission steamer *Albatross* in 1888, and from other sources. By William H. Dall.
pp. 173–191, 3 pls.

P. 850. Descriptions of two supposed new species of mice from Costa Rica and Mexico, with remarks on *Hesperomys melanophrys* of Coues. By J. A. Allen.
pp. 193–196.

P. 851. Contributions toward a monograph of the Noctuidæ of temperate North America. Revision of the species of *Mamestra*. By John B. Smith.
pp. 197–276, 4 pls.

P. 852. Report upon the annelida (Polychæta) of Beaufort, North Carolina. By E. A. Andrews.
pp. 277–302, 7 pls.

P. 853. On *Eleginus* of Fisher, otherwise called *Tilesia* or *Pleurogadus*. By Theodore Gill.
pp. 303–305.

P. 854. List of shells collected on the west coast of South America, principally between latitudes 7° 30′ S. and 8° 49′ N., by Dr. W. H. Jones, surgeon, U. S. Navy. By Robert E. C. Stearns.
pp. 307–335.

P. 855. Descriptions of new genera, species, and subspecies of birds from Costa Rica. By George K. Cherrie.
pp. 337–346.

P. 856. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXI. Descriptions of apodal fishes from the tropical Pacific. By Charles H. Gilbert.
pp. 347–352.

P. 857. Description of a new species of chamæleon from Kilima-njaro, eastern Africa. By Leonhard Stejneger.
pp. 353–354, 1 fig.

P. 858. The genus *Panopeus*. By James E. Benedict and Mary J. Rathbun.
pp. 355–385, 6 pls.

P. 859. Some observations on the Havesu-pai Indians. By R. W. Shufeldt.
pp. 387–390, 2 pls.

P. 860. The Navajo belt-weaver. By R. W. Shufeldt.
pp. 391–393, 1 plate.

P. 861. On the genera *Labrichthys* and *Pseudolabrus*. By Theodore Gill.
pp. 395–404.

P. 862. Description of a new scincoid lizard from East Africa. By Leonhard Stejneger.
pp. 405–406.

P. 863. Description of a new species of lizard from the island of San Pedro Martir, Gulf of California. By Leonhard Stejneger.
pp. 407–408.

P. 864. Description of a new North American lizard of the genus *Sauromalus*. By Leonhard Stejneger.
pp. 409–411.

P. 865. Notes on and list of birds and eggs collected in Arctic America, 1861–1866. By R. MacFarlane.
pp. 413–446.

P. 866. On the characters of some paleozoic fishes. By E. D. Cope.
pp. 447–463, 6 pls.

P. 867. Description of a new species of whippoorwill from Costa Rica. By Robert Ridgway.
pp. 465–466.

P. 868. Notes on some birds from the interior of Honduras. By Robert Ridgway.
pp. 467–471.

P. 869. Notes on some Costa Rican birds. By Robert Ridgway.
pp. 473–478.

P. 870. Note on *Pachyrhamphus albinucha* Burmeister. By Robert Ridgway.
pp. 479–480.

P. 871. Description of two supposed new forms of *Thamnophilus*. By Robert Ridgway.
p. 481.

P. 872. Description of a new sharp-tailed sparrow from California. By Robert Ridgway.
pp. 483–484.

P. 873. Notes on *Sceloporus variabilis* and its geographical distribution in the United States. By Leonhard Stejneger.
pp. 485–488.

P. 874. Notes on Japanese birds contained in the Science College Museum, Imperial University, Tokyo, Japan. By Leonhard Stejneger.
pp. 489–498.

P. 875. Notes on the cubital coverts in the birds of paradise and bower birds. By Leonhard Stejneger.
pp. 499–500.

P. 876. Notes on some North American snakes. By Leonhard Stejneger.
pp. 501–505.

P. 877. Note on the genus *Sittasomus* of Swainson. By Robert Ridgway.
pp. 507–510.

P. 878. On the snakes of the Californian genus *Lichanura*. By Leonhard Stejneger.
pp. 511–515.

P. 879. Notes on Costa Rican birds. By George K. Cherrie.
pp. 517–537.

P. 880. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXII. Description of thirty-four new species of fishes collected in 1888 and 1889, principally among the Santa Barbara Islands and in the Gulf of California. By Charles H. Gilbert.
pp. 539–566.

P. 881. The biology of the hymenopterous insects of the family Chalcididæ. By L. O. Howard.
pp. 567–588.

P. 882. A critical review of the characters and variations of the snakes of North America. By E. D. Cope.
pp. 589–694.

P. 883. Note on the genus *Hiatula* of Lacépède or *Tautoga* of Mitchill. By Theodore Gill.
p. 695.

P. 884. Note on the genus *Chonerhinus* or *Xenopterus*. By Theodore Gill.
pp. 697–699.

P. 885. On the genus *Gnathanacanthus* of Bleeker. By Theodore Gill.
pp. 701–704, 1 fig.

P. 886. Notes on the Tetraodontoidea. By Theodore Gill.
pp. 705–720, 1 plate.

VOLUME XV, CONTAINING PAPERS 887–918.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XV. | 1892. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1893.
8vo., pp. vi, 1–508, 84 pls., 8 figs.

P. 887. Preliminary descriptions of thirty-seven new species of hermit crabs of the genus *Eupagurus* in the U. S. National Museum. By James E. Benedict.
pp. 1–26.

P. 888. Description of two apparently new fly-catchers from Costa Rica. By George K. Cherrie.
pp. 27–28.

P. 889. A maid of Wolpai. By R. W. Shufeldt.
pp. 29–31, 1 plate.

P. 890. Contributions toward a monograph of the Noctuidæ of boreal America: Revision of the genus *Cucullia*. By John B. Smith.
pp. 33–52, 1 plate.

P. 891. Contributions toward a monograph of the Noctuidæ of boreal America: Revision of the Dicopinæ. By John B. Smith.
pp. 53–64.

P. 892. Contributions toward a monograph of the Noctuidæ of boreal America: Revision of *Xylomiges* and *Morrisonia*. By John B. Smith.
pp. 65–86, 1 plate.

P. 893. Notes on avian entozoa. By Edwin Linton.
pp. 87–113, 5 pls.

P. 894. Preliminary description of a new genus and species of blind cave salamander from North America. By Leonhard Stejneger.
pp. 115–117, 1 plate.

P. 895. Descriptions of two new forms of *Basileuterus rufifrons*, from Mexico. By Robert Ridgway.
p. 119.

P. 896. Description of a new species of star-gazer, *Cathetostoma albigutta*, from the Gulf of Mexico. By Tarleton H. Bean.
pp. 121–122.

P. 897. The fishes of San Diego, California. By Carl H. Eigenmann.
pp. 123–178, 9 pls.

P. 898. An annotated list of the shells of San Pedro Bay and vicinity (with a description of two new species by W. H. Dall). By Mrs. M. Burton Williamson.
pp. 179–220, 5 pls.

P. 899. Chinese relics in Alaska. By T. Dix Bolles.
p. 221, 1 plate.

P. 900. Corystoid crabs of the genera *Telmessus* and *Erimacrus*. By James E. Benedict.
pp. 223–230, 3 pls.

P. 901. Catalogue of the crabs of the family Pericerídæ in the U. S. National Museum. By Mary J. Rathbun.
pp. 231–277, 13 pls.

P. 902. The evolution of house-building among the Navajo Indians. By R. W. Shufeldt.
pp. 279–282, 3 pls.

P. 903. Notes on fishes collected in Mexico by Prof. Alfredo Dugès, with descriptions of new species. By Tarleton H. Bean.
pp. 283–287, 1 plate.

P. 904. Notes on a collection of birds made by Mr. Harry V. Henson in the island of Yezo, Japan. By Leonhard Stejneger.
pp. 289–359, 1 plate.

P. 905. Insects of the subfamily Encyrtinæ with branched antennæ. By L. O. Howard.
pp. 361–369, 2 pls.

P. 906. Two additions to the Japanese avifauna, including description of a new species. By Leonhard Stejneger.
pp. 371–373.

P. 907. On the ejection of blood from the eyes of horned toads. By O. P. Hay.
pp. 375–378.

P. 908. Some observations on the turtles of the genus *Malaclemys*. By O. P. Hay.
pp. 379–383.

P. 909. On the breeding habits, eggs, and young of certain snakes. By O. P. Hay.
pp. 385–397.

P. 910. Notes on the flowers of *Anthoxanthum odoratum* L. By Theodor Holm.
pp. 399–403, 1 plate.

P. 911. Notes on the Unionidæ of Florida and the southeastern States. By Charles T. Simpson.
pp. 405–436, 26 pls.

P. 912. On a new subfamily of phyllostone bats. By Harrison Allen.
pp. 437–439, 1 fig.

P. 913. Description of a new genus of phyllostone bats. By Harrison Allen.
pp. 441–442, 2 figs.

P. 914. On Temminck's bat, *Scotophilus temminckii*. By Harrison Allen.
pp. 443–444.

P. 915. An annotated catalogue of the mammals collected by Dr. W. L. Abbott in the Kilima-njaro region, East Africa. By Frederick W. True.
pp. 445–480, 6 pls., 5 figs.

P. 916. A description of the golden trout of Kern River, California, *Salmo mykiss agua-bonita*. By David S. Jordan.
pp. 481–483.

P. 917. On the occurrence of the spiny boxfish (genus *Chilomycterus*) on the coast of California. By Carl H. Eigenmann.
p. 485, 1 plate.

P. 918. Description of some fossil plants from the Great Falls coal field of Montana. By William M. Fontaine.
pp. 487–495, 3 pls.

VOLUME XVI, CONTAINING PAPERS 919–975.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XVI. | 1893. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1894.
8vo., pp. x, 1–808, 84 pls., 22 figs.

P. 919. Introduction to a monograph of the North American bats. By Harrison Allen.
pp. 1–28.

P. 920. Notes on the genera of Vespertilionidæ. By Harrison Allen.
pp. 29–31.

P. 921. Notes on a few fossil plants from the Fort Union group of Montana, with a description of one new species. By F. H. Knowlton.
pp. 33–36, 2 pls.

P. 922. On a collection of batrachians and reptiles from Mount Orizaba, Mexico, with descriptions of two new species. By W. S. Blatchley.
pp. 37–42.

P. 923. Description of two supposed new species of swifts. By Robert Ridgway.
pp. 43–44.

P. 924. Notes on American hemiptera heteroptera. By A. L. Montandon.
pp. 45–52.

P. 925. Catalogue of the fresh-water fishes of Central America and southern Mexico. By Carl H. Eigenmann.
pp. 53–60.

P. 926. On the making of gelatin casts. By J. W. Scollick.
pp. 61–62.

P. 927. Catalogue of the crabs of the family Maiidæ in the U. S. National Museum. By Mary J. Rathbun.
pp. 63–103, 6 pls.

P. 928. Notes on Erian (Devonian) plants from New York and Pennsylvania. By D. P. Penhallow.
pp. 105–114, 6 pls.

P. 929. Notes on *Nematophyton crassum*. By D. P. Penhallow.
pp. 115–118, 4 pls.

P. 930. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIII. Report on the Actiniæ collected by the U. S. Fish Commission steamer *Albatross* during the winter of 1887–88. By J. Playfair McMurrich.
pp. 119–216, 17 pls.

P. 931. On the status of the gray shrike, collected by Captain Blakiston, in Yezo, Japan. By Leonhard Stejneger.
pp. 217–218.

P. 932. Throwing-sticks from Mexico and California. By Otis T. Mason.
pp. 219–221, 6 figs.

P. 933. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIV. Descriptions of new genera and species of crabs from the west coast of North America and the Sandwich Islands. By Mary J. Rathbun.
pp. 223–260.

P. 934. Notes on some fossil plants from the Trinity division of the Comanche series of Texas. By William M. Fontaine.
pp. 261–282, 8 pls.

P. 935. Observations on the blind crayfishes of Indiana, with a description of a new subspecies; *Cambarus pellucidus testii*. By W. P. Hay.
pp. 283–286, 2 pls.

P. 936. The shofar—its use and origin. By Cyrus Adler.
pp. 287–301, 4 pls.

P. 937. List of Diatomaceæ from a deep-sea dredging in the Atlantic Ocean off Delaware Bay by the U. S. Fish Commission steamer *Albatross*. By Albert Mann.
pp. 303–312.

P. 938. Description of a new species of cyprinoid fish, *Couesius greeni*, from the headwaters of Fraser River in British Columbia. By David S. Jordan.
pp. 313–314.

P. 939. Note on the wall-eyed pollack, *Pollachius chalcogrammus fucensis*, of Puget Sound. By David S. Jordan and Charles H. Gilbert.
pp. 315–316.

P. 940. Preliminary report on the molluscan species collected by the United States scientific expedition to West Africa in 1889–90. By Robert E. C. Stearns.
pp. 317–339.

P. 941. On rare or little-known mollusks from the west coast of North and South America, with descriptions of new species. By Robert E. C. Stearns.
pp. 341–352, 1 plate.

P. 942. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXV. Report on the mollusk-fauna of the Galapagos Islands with descriptions of new species. By Robert E. C. Stearns.
pp. 353–450, 2 pls.

P. 943. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVI. Report on the pteropods and heteropods collected by the U. S. Fish Commission steamer *Albatross* during the voyage from Norfolk, Virginia, to San Francisco, California, 1887–88. By James I. Peck.
pp. 451–466, 3 pls.

P. 944. Diagnosis of a new California lizard. By Leonhard Stejneger.
p. 467.

P. 945. Description of a supposed new species of *Odontophorus* from southern Mexico. By Robert Ridgway.
pp. 469–470.

P. 946. A subtropical miocene fauna in Arctic Siberia. By William H. Dall.
pp. 471–478, 1 plate.

P. 947. Notes on a collection of birds from eastern Nicaragua and the Rio Frio, Costa Rica, with a description of a supposed new *Trogon*. By Charles W. Richmond.
pp. 479–532.

P. 948. Description of a new species of fruit bat, *Pteropus aldabrensis*, from Aldabra Island. By Frederick W. True.
pp. 533–534.

P. 949. Notice of the crustaceans collected by the United States scientific expedition to the west coast of Africa. By James E. Benedict.
pp. 535–541.

P. 950. A descriptive catalogue of the harvest-spiders (Phalangiidæ) of Ohio. By Clarence M. Weed.
pp. 543–563, 13 pls., 1 fig.

P. 951. Scientific results of the United States eclipse expedition to West Africa, 1889–90. Report upon the insecta, arachnida, and myriapoda. By C. V. Riley.
pp. 565–590, 1 plate, 13 figs.

P. 952. On some fossil unios and other fresh-water shells from the drift at Toronto, Canada: with a review of the distribution of the Unionidæ of northeastern North America. By Charles T. Simpson.
pp. 591–595.

P. 953. Descriptions of some new birds collected on the islands of Aldabra and Assumption, northwest of Madagascar, by Dr. W. L. Abbott. By Robert Ridgway.
pp. 597–600.

P. 954. Notes on a small collection of mammals from the Tana River, East Africa, with descriptions of new species. By Frederick W. True.
pp. 601–603.

P. 955. Remarks on the avian genus *Myiarchus*, with special reference to *M. yucatanensis* Lawrence. By Robert Ridgway.
pp. 605–608.

P. 956. On a small collection of birds from Costa Rica. By Robert Ridgway.
pp. 609–614.

P. 957. Notes on a third installment of Japanese birds in the Science College Museum, Tokyo, Japan, with descriptions of new species. By Leonhard Stejneger.
pp. 615–638.

P. 958. Land shells of the genus *Bulimulus* in Lower California, with descriptions of several new species. By William H. Dall.
pp. 639–647, 2 pls.

P. 959. Descriptions of new species of American fresh-water crabs. By Mary J. Rathbun.
pp. 649–661, 5 pls.

P. 960. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVII. Catalogue of a collection of birds made in Alaska by Mr. C. H. Townsend during the cruise of the U. S. Fish Commission steamer *Albatross* in the summer and autumn of 1888. By Robert Ridgway.
pp. 663–665.

P. 961. A revision of the genus *Formicarius* Boddaert. By Robert Ridgway.
pp. 667–686.

P. 962. Description of a new storm petrel from the coast of western Mexico. By Robert Ridgway.
pp. 687–688.

P. 963. Description of a new species of mouse (*Sitomys decolorus*) from Central America. By Frederick W. True.
pp. 689–690.

P. 964. Description of a new *Geothlypis* from Brownsville, Texas. By Robert Ridgway.
pp. 691–692.

P. 965. The proper generic name of the tunnies. By Theodore Gill.
pp. 693–694.

P. 966. The shell heaps of the east coast of Florida. By De Witt Webb.
pp. 695–698, 7 pls.

P. 967. Description of a new blennioid fish from California. By Tarleton H. Bean.
pp. 699–701, 1 fig.

P. 968. Notes on myriapoda from Loanda, Africa, collected by Mr. Heli Chatelaine, including a description of a new genus and species. By O. F. Cook.
pp. 703–708.

P. 969. Description of a new species of blind-snakes (*Typhlopidæ*) from the Congo Free State. By Leonhard Stejneger.
pp. 709–710.

P. 970. On some collections of reptiles and batrachians from East Africa and the adjacent islands, recently received from Dr. W. L. Abbott and Mr. William Astor Chanler, with descriptions of new species. By Leonhard Stejneger.
pp. 711–741.

P. 971. Notes on recent collections of North American land, fresh-water, and marine shells received from the U. S. Department of Agriculture. By Robert E. C. Stearns.
pp. 743–755.

P. 972. On the relationships of Taylor's mouse, *Sitomys taylori*. By Frederic W. True.
pp. 757–758.

P. 973. Notes on the natural history of Aldabra, Assumption and Gloriosa islands, Indian Ocean. By W. L. Abbott.
pp. 759–764, 1 fig.

P. 974. Remarks on Japanese quails. By Leonhard Stejneger.
pp. 765–769.

P. 975. Notes on birds of Central Mexico, with descriptions of forms believed to be new. By P. L. Jouy.
pp. 771–791.

VOLUME XVII, CONTAINING PAPERS 976–1032.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XVII. | 1894. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1895.

8vo., pp. xiii, 1–765, 32 pls., 83 figs.

P. 976. Notes on mammals of Baltistan and the Vale of Kashmir, presented to the National Museum by Dr. W. L. Abbott. By Frederick W. True.

pp. 1–16.

P. 977. Description of a new lizard (*Verticaria beldingi*), from California. By Leonhard Stejneger.

pp. 17–18.

P. 978. Note on a blue mineral, supposed to be ultramarine, from Silver City, New Mexico. By R. L. Packard.

pp. 19–20.

P. 979. Descriptions of two new species of crabs from the western Indian Ocean, presented to the National Museum by Dr. W. L. Abbott. By Mary J. Rathbun.

pp. 21–24.

P. 980. Descriptions of a new genus and two new species of African fresh-water crabs. By Mary J. Rathbun.

pp. 25–27.

P. 981. An analysis of jadeite from Mogoung, Burma. By Oliver C. Farrington.

pp. 29–31.

P. 982. Notes on some skeletons and skulls of porpoises of the genus *Prodelphinus*, collected by Dr. W. L. Abbott in the Indian Ocean. By Frederick W. True.

pp. 33–37.

P. 983. Description of nests and eggs of some new birds collected on the island of Aldabra, northwest of Madagascar, by Dr. W. L. Abbott. By Charles Bendire.

pp. 39–41.

P. 984. Notes on the crabs of the family Inachidæ in the United States National Museum. By Mary J. Rathbun.

pp. 43–75, 1 plate.

P. 985. On the formation of stalactites and gypsum incrustations in caves. By George P. Merrill.

pp. 77–81, 4 pls.

P. 986. Descriptions of a new genus and four new species of crabs from the Antillean region. By Mary J. Rathbun.

pp. 83–86.

P. 987. The formation of sandstone concretions. By George P. Merrill.

pp. 87–88, 1 plate.

P. 988. Monograph of the genus *Gnathodon* Gray (*Rangia* Desmoulins). By William H. Dall.
pp. 89–106, 1 plate.

P. 989. On the nomenclature and characteristics of the lampreys. By Theodore Gill.
pp. 107–110.

P. 990. The nomenclature of the Myliobatidæ or Aëtobatidæ. By Theodore Gill.
pp. 111–114.

P. 991. The nomenclature of the family Pœciliidæ or Cyprinodontidæ. By Theodore Gill.
pp. 115–116.

P. 992. The differential characters of the Salmonidæ and Thymallidæ. By Theodore Gill.
pp. 117–122.

P. 993. On the relations and nomenclature of *Stizostedion* or *Lucioperca*. By Theodore Gill.
pp. 123–128.

P. 994. Description of a new species of cotton rat (*Sigmodon minima*), from New Mexico. By Edgar A. Mearns.
pp. 129–130.

P. 995. Notes on the invertebrate fauna of the Dakota formation, with descriptions of new molluscan forms. By C. A. White.
pp. 131–138, 1 plate.

P. 996. The shells of the Tres Marias and other localities along the shores of Lower California and the Gulf of California. By Robert E. C. Stearns.
pp. 139–204.

P. 997. Notes on a Japanese species of reed warbler. By Leonhard Stejneger.
pp. 205–206.

P. 998. A review of the fossil flora of Alaska, with descriptions of new species. By F. H. Knowlton.
pp. 207–240, 1 plate.

P. 999. Diagnoses of new North American mammals. By Frederick W. True.
pp. 241–243.

P. 1000. Descriptions of new species of starfishes and ophiurans, with a revision of certain species formerly described; mostly from the collections made by the United States Commission of Fish and Fisheries. By A. E. Verrill.
pp. 245–297.

P. 1001. Notes on the anatomy and affinities of the Cœrebidæ and other American birds. By Frederic A. Lucas.
pp. 299–312, 13 figs.

P. 1002. Discovery of the genus *Oldhamia* in America. By Charles D. Walcott.
pp. 313–315, 1 fig.

P. 1003. Notes on reptiles and batrachians collected in Florida in 1892 and 1893. By Einar Lönnberg.
pp. 317–339, 3 figs.

P. 1004. On the rodents of the genus *Sminthus* in Kashmir. By Frederick W. True.
pp. 341–343.

P. 1005. The relationship of the lacertilian genus *Anniella* Gray. By G. Baur.
pp. 345–351.

P. 1006. Diagnoses of some undescribed wood rats (genus *Neotoma*) in the National Museum. By Frederick W. True.
pp. 353–355.

P. 1007. Descriptions of twenty-two new species of birds from the Galapagos Islands. By Robert Ridgway.
pp. 357–370.

P. 1008. Descriptions of some new birds from Aldabra, Assumption, and Gloriosa islands, collected by Dr. W. L. Abbott. By Robert Ridgway.
pp. 371–373.

P. 1009. A revision of the fishes of the subfamily Sebastinæ of the Pacific coast of America. By Carl H. Eigenmann and Charles H. Beeson.
pp. 375–407.

P. 1010. Additional notes on the native trees of the Lower Wabash Valley. By Robert Ridgway.
pp. 409–421, 6 pls.

P. 1011. Distribution of the land and fresh-water mollusks of the West Indian region, and their evidence with regard to past changes of land and sea. By Charles T. Simpson.
pp. 423–450, 1 plate.

P. 1012. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXVIII. On Cetomimidæ and Rondeletiidæ, two new families of bathybial fishes from the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean.
pp. 451–454, 1 plate.

P. 1013. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXIX. A revision of the order Heteromi, deep-sea fishes, with a description of the new generic types *Macdonaldia* and *Lipogenys*. By G. Brown Goode and Tarleton H. Bean.
pp. 455–470, 2 pls.

P. 1014. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXX. On *Harriotta*, a new type of chimæroid fish from the deeper waters of the northwestern Atlantic. By G. Brown Goode and Tarleton H. Bean
pp. 471–473, 1 plate.

P. 1015. Overlaying with copper by the American aborigines. By Otis T. Mason.
pp. 475–477, 4 figs.

P. 1016. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXI. Descriptions of new genera and species of the family Lithodidæ, with notes on the young of *Lithodes camtschaticus* and *Lithodes brevipes*. By James E. Benedict.
pp. 479–488.

P. 1017. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXII. Report on the crustacea of the order Stomatopoda collected by the steamer *Albatross* between 1885 and 1891, and on other specimens in the U. S. National Museum. By Robert Payne Bigelow.
pp. 489–550, 3 pls., 28 figs.

P. 1018. The pterylography of certain American goat-suckers and owls. By Hubert Lyman Clark.
pp. 551–572, 11 figs.

P. 1019. The box tortoises of North America. By W. E. Taylor.
pp. 573–588, 7 figs.

P. 1020. Description of *Uta mearnsi*, a new lizard from California. By Leonhard Stejneger.
pp. 589–591.

P. 1021. Notes on Butler's garter snake. By Leonhard Stejneger.
pp. 593–594.

P. 1022. On the specific name of the coachwhip snake. By Leonhard Stejneger.
pp. 595–596.

P. 1023. Description of a new salamander from Arkansas with notes on *Ambystoma annulatum*. By Leonhard Stejneger.
pp. 597–599.

P. 1024. Diagnosis of a new genus of *Trogons* (*Heterotrogon*), based on *Hapaloderma vittatum* of Shelley; with a description of the female of that species. By Charles W. Richmond.
pp. 601–603.

P. 1025. On the bothriothoracine insects of the United States. By L. O. Howard.
pp. 605–613.

P. 1026. Notes on the geographical distribution of scale insects. By T. D. A. Cockerell.
pp. 615–625.

P. 1027. Description of a new species of rockfish, *Sebastichthys brevispinis*, from Alaska. By Tarleton H. Bean.
pp. 627–628.

P. 1028. Description of a new species of fish, *Bleekeria gilli*. By Tarleton H. Bean.
pp. 629–630

P. 1029. Description of *Gobioides broussoneti*, a fish new to North America, from the Gulf of Mexico. By Tarleton H. Bean and Barton A. Bean.
pp. 631–632, 1 fig.

P. 1030. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXIII. Descriptions of two new flounders, *Gastropsetta frontalis* and *Cyclopsetta chittendeni*. By Barton A. Bean.
pp. 633–636, 3 figs.

P. 1031. Notes on some eruptive rocks from Gallatin, Jefferson, and Madison counties, Montana. By George P. Merrill.
pp. 637–673, 10 figs.

P. 1032. Scientific results of explorations by the U. S. Fish Commission steamer *Albatross*. No. XXXIV. Report on mollusca and brachiopoda dredged in deep water, chiefly near the Hawaiian Islands, with illustrations of hitherto unfigured species from northwest America. By William H. Dall.
pp. 675–733, 10 pls., 2 figs.

VOLUME XVIII, CONTAINING PAPERS 1033–1100.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XVIII. | 1895. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1896.
8vo., pp. xiv, 1–819, 35 pls., 46 figs.

P. 1033. Diagnoses of new mollusks from the survey of the Mexican boundary. By William H. Dall.
pp. 1–6.

P. 1034. Diagnoses of new species of mollusks from the west coast of America. By William H. Dall.
pp. 7–20.

P. 1035. Diagnoses of new tertiary fossils from the southern United States. By William H. Dall.
pp. 21–46.

P. 1036. Two new diplopod myriapoda of the genus *Oxydesmus* from the Congo. By O. F. Cook.
pp. 47–52.

P. 1037. *Priodesmus*, a new genus of diplopoda from Surinam. By O. F. Cook.
pp. 53–57, 1 plate.

P. 1038. On *Geophilus attenuatus* Say, of the class Chilopoda. By O. F. Cook.
pp. 59–62.

P. 1039. An arrangement of the Geophilidæ, a family of Chilopoda. By O. F. Cook.
pp. 63–75.

P. 1040. Description of a new species of golden beetle from Costa Rica. By Martin L. Linell.
pp. 77–78.

P. 1041. Two new species of beetles of the Tenebrionid genus *Echocerus*. By F. H. Chittenden.
pp. 79–80.

P. 1042. East African diplopoda of the suborder Polydesmoidea, collected by Mr. William Astor Chanler. By O. F. Cook.
pp. 81–111, 5 pls.

P. 1043. Description of a new species of pipefish (*Siphostoma scorilli*) from Corpus Christi, Texas. By Barton W. Evermann and William C. Kendall.
pp. 113–115.

P. 1044. Description of a new species of snake (*Tantilla eiseni*) from California. By Leonhard Stejneger.
pp. 117–118.

P. 1045. Description of a new species of ground warbler from eastern Mexico. By Robert Ridgway.
pp. 119–120.

P. 1046. East African odonata, collected by Dr. W. L. Abbott. By Philip P. Calvert.
pp. 121–142, 15 figs.

P. 1047. Notes on the odonata from East Africa, collected by the Chanler expedition. By Philip P. Calvert.
pp. 143–145.

P. 1048. On the proper name of the gunnels or butter-fishes. By Theodore Gill.
pp. 147–151.

P. 1049. The differential characters of the syngnathid and hippocampid fishes. By Theodore Gill.
pp. 153–159.

P. 1050. Notes on the synonymy of the Torpedinidæ or Narcobatidæ. By Theodore Gill.
pp. 161–165.

P. 1051. The families of synentognathous fishes and their nomenclature. By Theodore Gill.
pp. 167–178.

P. 1052. On the application of the name *Teuthis* to a genus of fishes. By Theodore Gill.
pp. 179–189.

P. 1053. Notes on the nomenclature of *Scymnus* or *Scymnorhinus*, a genus of sharks. By Theodore Gill.
pp. 191–193.

P. 1054. Notes on the genus *Cephaleutherus* of Rafinesque, and other rays with aberrant pectoral fins (*Propterygia* and *Hieroptera*). By Theodore Gill.
pp. 195–198.

P. 1055. Notes on characinoid fishes with ctenoid scales, with a description of a new *Psectrogaster*. By Theodore Gill.
pp. 199–203.

P. 1056. The differential characters of characinoid and erythrinoid fishes. By Theodore Gill.
pp. 205–209.

P. 1057. Notes on *Orectolobus* or *Crossorhinus*, a genus of sharks. By Theodore Gill.
pp. 211–212.

P. 1058. Note on the fishes of the genus *Characinus*. By Theodore Gill.
pp. 213–215.

P. 1059. The nomenclature of *Rachicentron* or *Elacate*, a genus of acanthopterygian fishes. By Theodore Gill.
pp. 217–219.

P. 1060. Note on the nomenclature of the pœcilioid fishes. By Theodore Gill.
pp. 221–224.

P. 1061. The nomenclature of the fishes of the characinoid genus *Tetragonopterus*. By Theodore Gill.
pp. 225–227.

P. 1062. List of the lepidoptera collected in eastern Africa by Dr. W. L. Abbott, with descriptions of some apparently new species. By W. J. Holland.
pp. 229–258.

P. 1063. List of the lepidoptera collected in Somali-land, East Africa, by Mr. William Astor Chanler and Lieutenant von Höhnel. By W. J. Holland.
pp. 259–264.

P. 1064. List of the lepidoptera from Aldabra, Seychelles, and other East African islands, collected by Dr. W. L. Abbott. By W. J. Holland.
pp. 265–273.

P. 1065. List of the lepidoptera collected in Kashmir by Dr. W. L. Abbott. By W. J. Holland.
pp. 275–279, 2 pls.

P. 1066. Notes on asbestos and asbestiform minerals. By George P. Merrill.
pp. 281–292.

P. 1067. Preliminary description of some new birds from the Galapagos archipelago. By Robert Ridgway.
pp. 293–294.

P. 1068. The classification and geographical distribution of the pearly fresh-water mussels. By Charles T. Simpson.
pp. 295–343, 1 plate.

P. 1069. Note on the occurrence of an armadillo of the genus *Xenurus* in Honduras. By Frederick W. True.
pp. 345–347, 2 pls.

P. 1070. The genus *Callinectes*. By Mary J. Rathbun.
pp. 349–375, 17 pls.

P. 1071. Descriptions of two new species of fresh-water crabs from Costa Rica. By Mary J. Rathbun.
pp. 377–379, 2 pls., 3 figs.

P. 1072. Description of four new triassic unios from the staked plains of Texas. By Charles T. Simpson.
pp. 381–385, 5 figs.

P. 1073. Revision of the North American Empidæ—a family of two-winged insects. By D. W. Coquillett.
pp. 387–440.

B. 1074. Description of a new subspecies of the genus *Peucedramus* Coues. By Robert Ridgway.
p. 441.

P. 1075. Preliminary diagnoses of new mammals from the Mexican boundary of the United States. By Edgar A. Mearns.
pp. 443–447.

P. 1076. Characters of a new American family of passerine birds. By Robert Ridgway.
pp. 449–450.

P. 1077. Osteological and pterylographical characters of the Procniatidæ. By Frederic A. Lucas.
p. 505–507, 5 figs.

P. 1078. Catalogue of a collection of birds made by Dr. W. L. Abbott in Kashmir, Baltistan and Ladak, with notes on some of the species, and a description of a new species of *Cyanecula*. By Charles W. Richmond.
pp. 451–503.

P. 1079. On birds collected by Dr. W. L. Abbott in the Seychelles, Amirantes, Gloriosa, Assumption, Aldabra, and adjacent islands, with notes on habits, etc., by the collector. By Robert Ridgway.
pp. 509–546.

P. 1080. Descriptions of two new subspecies of the downy woodpecker, *Dryobates pubescens* Linnæus. By Harry C. Oberholser.
pp. 547–550.

P. 1081. Preliminary description of a new subgenus and six new species and subspecies of hares, from the Mexican border of the United States. By Edgar A. Mearns.
pp. 551–565.

P. 1082. Note on *Plectroplites* and *Hypoplectrodes*, genera of serranoid fishes. By Theodore Gill.
pp. 567–568.

P. 1083. Catalogue of a collection of birds made by Dr. W. L. Abbott in eastern Turkestan, the Thian-Shan Mountains, and Tagdumbash Pamir, central Asia, with notes on some of the species. By Charles W. Richmond.
pp. 569–591.

P. 1084. Descriptions of three species of sand fleas (Amphipods) collected at Newport, Rhode Island. By Sylvester D. Judd.
pp. 593–603, 11 figs.

P. 1085. Remarks on the synonymy of some North American scolytid beetles. By William Eichhoff.
pp. 605–610.

P. 1086. Fossil jelly fishes from the Middle Cambrian terrane. By Charles D. Walcott.
pp. 611–614, 2 pls.

P. 1087. Preliminary descriptions of a new genus and three new species of crustaceans from an artesian well at San Marcos, Texas. By James E. Benedict.
pp. 615–617.

P. 1088. Description of a new genus and species of blind tailed-batrachians from the subterranean waters of Texas. By Leonhard Stejneger.
pp. 619–621.

P. 1089. Description of a new stickleback (*Gasterosteus gladiunculus*) from the coast of Maine. By W. C. Kendall.
pp. 623–624.

P. 1090. Description of a new species of ant thrush from Nicaragua. By Charles W. Richmond.
pp. 625–626.

P. 1091. Partial list of birds collected at Alta Mira, Mexico, by Mr. Frank B. Armstrong. By Charles W. Richmond.
pp. 627–632.

P. 1092. On some reared parasitic hymenopterous insects from Ceylon. By L. O. Howard and William H. Ashmead.
pp. 633–648.

P. 1093. An annotated list of birds observed on the island of Margarita, and at Guanta and Laguayra, Venezuela. (With critical notes and descriptions of new species by Charles W. Richmond.) By Wirt Robinson.
pp. 649–685, 1 plate, 1 fig.

P. 1094. List of coleoptera collected on the Tana River, and on the Jombéné range, East Africa, by Mr. William Astor Chanler and Lieut. Ludwig von Höhnel, with descriptions of new genera and species. By Martin L. Linell.
pp. 686–716.

P. 1095. Contributions to the natural history of the Commander Islands. XI. The cranium of Pallas' cormorant. By Frederic A. Lucas.
pp. 717–719, 2 pls.

P. 1096. New species of North American coleoptera of the family Scarabæidæ. By Martin L. Linell.
pp. 721–731.

P. 1097. Observations on the development and migration of the urticating organs of sea nettles, *Cnidaria*. By Louis Murbach.
pp. 733–740.

P. 1098. List of the lepidoptera collected in East Africa, 1894, by Mr. William Astor Chanler and Lieut. Ludwig von Höhnel. By W. J. Holland.
pp. 741–767.

P. 1099. Notes on the vampire bat (*Diphylla ecaudata*), with special reference to its relationships with *Desmodus rufus*. By Harrison Allen.
pp. 769–777, 6 figs.

P. 1100. Description of a new species of bat of the genus *Glossophaga*. By Harrison Allen.
pp. 779–781.

VOLUME XIX, CONTAINING PAPERS 1101–1123.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XIX. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1897.
8 vo., pp. viii, 1–864, 68 pls., 52 figs.

P. 1101. A revision of the American moles. By Frederick W. True.
pp. 1–112, 4 pls., 46 figs., 5 maps, showing geographical distribution.

P. 1102. Descriptions of new cynipidous galls and gall-wasps in the United States National Museum. By William H. Ashmead.
pp. 113–136.

P. 1103. Preliminary diagnoses of new mammals from the Mexican border of the United States. By Edgar A. Mearns.
pp. 137–140.

P. 1104. Description of a new genus and four new species of crabs from the West Indies. By Mary J. Rathbun.
pp. 141–144.

P. 1105. A revision of the adult tapeworms of hares and rabbits. By Charles Wardell Stiles.
pp. 145–235, 21 pls.

P. 1106. Contributions to the natural history of the Commander Islands. XII. Fishes collected at Bering and Copper islands by Nikolai A. Grebnitski and Leonhard Stejneger. By Tarleton H. Bean and Barton A. Bean.
pp. 237–251.

P. 1107. Is the Florida box tortoise a distinct species? By Einar Lönnberg.
pp. 253–254.

P. 1108. Summary of the hemiptera of Japan, presented to the United States National Museum by Professor Mitzukuri. By Philip R. Uhler.
pp. 255–297.

P. 1109. On the genus *Remondia* Gabb, a group of cretaceous bivalve mollusks. By Timothy W. Stanton.
pp. 299–301, 1 plate.

P. 1110. Descriptions of tertiary fossils from the Antillean region. By R. J. Lechmere Guppy and William H. Dall.
pp. 303–331, 4 pls.

P. 1111. Report on the mollusks collected by the International Boundary Commission of the United States and Mexico, 1892–1894. By William H. Dall.
pp. 333–379, 3 pls.

P. 1112. Notes on fishes collected in Kamchatka and Japan by Leonhard Stejneger and Nicolai A. Grebnitski, with a description of a new blenny. By Tarleton H. Bean and Barton A. Bean.
pp. 381–392, 2 pls.

P. 1113. Descriptions of new species of North American coleoptera in the families Cerambycidæ and Scarabæidæ. By Martin L. Linell.
pp. 393–401.

P. 1114. Report on the fishes dredged in deep water near the Hawaiian Islands, with descriptions and figures of twenty-three new species. By Charles H. Gilbert and Frank Cramer.
pp. 403–435, 13 pls.

P. 1115. Descriptions of twenty-two new species of fishes collected by the steamer *Albatross*, of the United States Fish Commission. By Charles H. Gilbert.
pp. 437–457, 7 pls.

P. 1116. Birds of the Galapagos archipelago. By Robert Ridgway.
pp. 459–670, 2 pls., 6 figs., 48 charts.

P. 1117. On the fossil phyllopod genera, *Dipeltis* and *Protocaris*, of the family Apodidæ. By Charles Schuchert.
pp. 671–676, 1 plate.

P. 1118. Catalogue of a collection of birds made by Dr. W. L. Abbott in Madagascar, with descriptions of three new species. By Charles W. Richmond.
pp. 677–694.

P. 1119. On the insects collected by Dr. Abbott on the Seychelles, Aldabra, Gloriosa, and Providence islands, with descriptions of nine new species of coleoptera. By Martin L. Linell.
pp. 695–706.

P. 1120. Cambrian brachiopoda: genera *Iphidea* and *Yorkia*, with descriptions of new species of each, and of the genus *Acrothele*. By Charles D. Walcott.
pp. 707–718, 2 pls.

P. 1121. Descriptions of six new mammals from North America. By Edgar A. Mearns.
pp. 719–724.

P. 1122. The food plants of scale insects (Coccidæ). By T. D. A. Cockerell.
pp. 725–785.

P. 1123. Notes on larval cestode parasites of fishes. By Edwin Linton.
pp. 787–824, 8 pls.

VOLUME XX, CONTAINING PAPERS 1124–1139.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XX. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1898.
8vo., pp. xii, 1–932, 97 pls., 149 figs.

P. 1124. Revision of the orthopteran group Melanopli (Acridiidæ), with special reference to North American forms. By Samuel H. Scudder.
pp. 1–421, 26 pls.

P. 1125. Notes on the cestode parasites of fishes. By Edwin Linton.
pp. 423–456, 8 pls.

P. 1126. Preliminary diagnoses of new mammals of the genera *Lynx*, *Urocyon*, *Spilogale*, and *Mephitis*, from the Mexican boundary line. By Edgar A. Mearns.
pp. 457–461.

P. 1127. Description of a new blenny-like fish of the genus *Opisthocentrus*, collected in Vulcano Bay, Port Mororan, Japan, by Nicolai A. Grebnitski. By Tarleton H. Bean and Barton A. Bean.
pp. 463–464, 1 plate.

P. 1128. Description of a new crustacean of the genus *Sphæroma*, from a warm spring in New Mexico. By Harriet Richardson.
pp. 465–466.

P. 1129. Preliminary diagnoses of new mammals of the genera *Mephitis*, *Dorcelaphus*, and *Dicotyles*, from the Mexican border of the United States. By Edgar A. Mearns.
pp. 467–471.

P. 1130. New species of coleoptera of the family Chrysomelidæ, with a short review of the tribe Chlamydini. By Martin L. Linell.
pp. 473–485.

P. 1131. Notes on a collection of fishes from the Colorado Basin in Arizona. By Charles H. Gilbert and Norman Bishop Scofield.
pp. 487–499, 4 pls.

P. 1132. Preliminary diagnoses of new mammals of the genera *Sciurus*, *Castor*, *Neotoma*, and *Sigmodon*, from the Mexican boundary of the United States. By Edgar A. Mearns.
pp. 501–505.

P. 1133. Notes on trematode parasites of fishes. By Edwin Linton.
pp. 507–548, 15 pls.

P. 1134. Contributions to Philippine ornithology. Part I. A list of the birds known to inhabit the Philippine and Palawan islands, showing their distribution within the limits of the two groups. By Dean C. Worcester and Frank S. Bourns. Part II. Notes on the distribution of Philippine birds. By Dean C. Worcester.
pp. 549–625, 7 pls.

P. 1135. Supplement to the annotated catalogue of the published writings of Charles Abiathar White, 1886–1897. By Timothy W. Stanton.
pp. 627–642.

P. 1136. Observations on the Astacidæ in the United States National Museum and in the Museum of Comparative Zoology, with descriptions of new species. By Walter Faxon.
pp. 643–694, 9 pls.

P. 1137. A revision of tropical African diplopoda of the family Strongylosomatidæ. By O. F. Cook.
pp. 695–708.

P. 1138. American leaf-hoppers of the subfamily Typhlocybinæ. By Clarence P. Gillette.
pp. 709–773, 149 figs.

P. 1139. Revision of the deep-water mollusca of the Atlantic coast of North America, with descriptions of new genera and species. Part I. Bivalvia. By A. E. Verrill and Katherine J. Bush.
pp. 775–901, 27 pls.

VOLUME XXI, CONTAINING PAPERS 1140–1178.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XXI. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1899.

8vo., pp. xiii, 1–933, 89 pls., 105 figs.

P. 1140. Contributions toward a monograph of the lepidopterous family Noctuidæ of boreal North America. A revision of the species of *Acronycta* Ochsenheimer, and of certain allied genera. By John B. Smith and Harrison G. Dyar.
pp. 1–194, 22 pls.

P. 1141. Descriptions of the species of *Cycadeoidea*, or fossil cycadean trunks, thus far determined from the lower cretaceous rim of the Black Hills. By Lester F. Ward.
pp. 195–229.

P. 1142. On some new parasitic insects of the subfamily Encyrtinæ. By L. O. Howard.
pp. 231–248.

P. 1143. On the coleopterous insects of Galapagos Islands. By Martin L. Linell.
pp. 249–268.

P. 1144. The birds of the Kuril Islands. By Leonhard Stejneger.
pp. 269–296.

P. 1145. Description of a species of *Actaeon* from the quaternary bluffs at Spanish Bight, San Diego, California. By Robert E. C. Stearns.
pp. 297–299, 1 fig.

P. 1146. Report on a collection of Japanese diptera, presented to the U. S. National Museum by the Imperial University of Tokyo. By D. W. Coquillett.
pp. 301–340.

P. 1147. Notes on the mammals of the Catskill Mountains, New York, with general remarks on the fauna and flora of the region. By Edgar A. Mearns.
pp. 341–360, 6 figs.

P. 1148. Topaz crystals in the mineral collection of the U. S. National Museum. By Arthur S. Eakle.
pp. 361–369, 22 figs.

P. 1149. Notes on *Cytherea* (*Tivela*) *crassatelloides* Conrad, with descriptions of many varieties. By Robert E. C. Stearns.
pp. 371–378, 3 pls.

P. 1150. On the occurrence of *Amphiuma*, the so-called Congo snake, in Virginia. By Hugh M. Smith.
pp. 379–380.

P. 1151. Description of a new species of spiny-tailed iguana from Guatemala. By Leonhard Stejneger.
pp. 381–383.

P. 1152. Cambrian brachiopoda: *Obolus* and *Lingulella*, with description of new species. By Charles D. Walcott.
pp. 385–420, 3 pls.

P. 1153. A revision of the wrens of the genus *Thryomanes* Sclater. By Harry C. Oberholser.
pp. 421–450.

P. 1154. American oniscoid diplopoda of the order Merocheta. By O. F. Cook.
pp. 451–468, 4 pls.

P. 1155. The osteology and relationships of the family Zeidæ. By Edwin C. Starks.
pp. 469–476, 6 pls.

P. 1156. A contribution to the knowledge of the variations o the tree frog, *Hyla regilla*. By Frederick C. Test.
pp. 477–492, 1 plate.

P. 1157. Japanese hymenoptera of the family Tenthredinidæ. By C. L. Marlatt.
pp. 493–506.

P. 1158. A contribution to a knowledge of the fresh-water crabs of America.—The Pseudothelphusinæ. By Mary J. Rathbun.
pp. 507–537, 18 figs.

P. 1159. Notes on a collection of fishes from Mexico, with description of a new species of *Platypœcilus*. By Barton A. Bean.
pp. 539–542, 1 fig.

P. 1160. The leeches of the U. S. National Museum. By J. Percy Moore.
pp. 543–563, 1 plate.

P. 1161. On the occurrence of *Caulolepis longidens* Gill, on the coast of California. By Charles H. Gilbert.
pp. 565–566.

P. 1162. The brachyura collected by the U. S. Fish Commission steamer *Albatross* on the voyage from Norfolk, Virginia, to San Francisco, California, 1887–88. By Mary J. Rathbun.
pp. 567–616, 4 pls.

P. 1163. On the nomenclature of the whalebone whales of the tenth edition of Linnæus's "Systema Naturæ." By Frederick W. True.
pp. 617–635.

P. 1164. A new snake from the eocene of Alabama. By Frederic A. Lucas.
pp. 637–638, 2 pls.

P. 1165. Notes on the capture of rare fishes. By Barton A. Bean.
pp. 639–640.

P. 1166. The feather-tracts of North American grouse and quail. By Hubert Lyman Clark.
pp. 641–653, 3 pls., 4 figs.

P. 1167. Note on *Oxycottus acuticeps* Gilbert, from Sitka and Kadiak, Alaska. By Tarleton H. Bean and Barton A. Bean.
pp. 655–656.

P. 1168. African diplopoda of the genus *Pachybolus*. By O. F. Cook.
pp. 657–666, 3 pls.

P. 1169. The diplopod family Striariidæ. By O. F. Cook.
pp. 667–676, 2 pls.

P. 1170. African diplopoda of the family Gomphodesmidæ. By O. F. Cook.
pp. 677–739, 7 pls.

P. 1171. Hydroida from Alaska and Puget Sound. By Charles C. Nutting.
pp. 741–753, 3 pls.

P. 1172. The fossil bison of North America. By Frederic A. Lucas.
pp. 755–771, 20 pls., 2 figs.

P. 1173. Petrographic report on rocks from the United States-Mexico boundary. By Edwin C. E. Lord.
pp. 773–782, 1 plate.

P. 1174. The land reptiles of the Hawaiian Islands. By Leonhard Stejneger.
pp. 783–813, 13 figs.

P. 1175. Key to the isopods of the Pacific coast of North America, with descriptions of twenty-two new species. By Harriet Richardson.
pp. 815–869, 34 figs.

P. 1176. Description of a new species of subterranean isopod. By W. P. Hay.
pp. 871–872, 1 plate.

P. 1177. Synopsis of the recent and tertiary Leptonacea of North America and the West Indies. By William H. Dall.
pp. 873–897, 2 pls.

P. 1178. Description of a new genus and species of discoglossoid toad from North America. By Leonhard Stejneger.
pp. 899–901, 1 plate, 4 figs.

VOLUME XXII, CONTAINING PAPERS 1179–1205.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XXII. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1900.
8vo., pp. xii, 1–1075, 18 pls., 15 figs.

P. 1179. The osteological characters of the fishes of the suborder Percesoces. By Edwin C. Starks.
pp. 1–10, 3 pls.

P. 1180. Notes on birds from the Cameroons district, West Africa. By Harry C. Oberholser.
pp. 11–19.

P. 1181. Descriptions of two new species of tortoises from the tertiary of the United States. By O. P. Hay.
pp. 21–24, 3 pls.

P. 1182. A list of the birds collected by Mr. R. P. Currie in Liberia. By Harry C. Oberholser.
pp. 25–37, 1 plate.

P. 1183. A list of the biting lice (*Mallophaga*) taken from birds and mammals of North America. By Vernon L. Kellogg.
pp. 39–100.

P. 1184. New species of nocturnal moths of the genus *Campometra*, and notes. By John B. Smith.
pp. 101–105.

P. 1185. Synopsis of the Solenidæ of North America and the Antilles. By William H. Dall.
pp. 107–112.

P. 1186. The osteology and relationship of the percoidean fish, *Dinolestes lewini*. By Edwin C. Starks.
pp. 113–120, 4 pls.

P. 1187. Description of two new species of crayfish. By W. P. Hay.
pp. 121–123, 2 figs.

P. 1188. Contributions to the natural history of the Commander Islands. No. XIII. A new species of stalked medusæ (*Haliclystus stejnegeri*.) By K. Kishinouye.
pp. 125–129, 3 figs.

P. 1189. Description of a new species of *Idotea* from Hakodate Bay, Japan. By Harriet Richardson.
pp. 131–134, 6 figs.

P. 1190. List of shells collected by Vernon Bailey in Heron and Eagle lakes, Minnesota, with notes. By Robert E. C. Stearns.
pp. 135–138.

P. 1191. Description of a new variety of *Haliotis* from California, with faunal and geographical notes. By Robert E. C. Stearns.
pp. 139–142.

P. 1192. On the Lower Silurian (Trenton) fauna of Baffin Land. By Charles Schuchert.
pp. 143–177, 3 pls., 2 figs.

P. 1193. Some neocene corals of the United States. By Henry Stewart Gane.
pp. 179–198, 1 plate.

P. 1194. A new fossil species of *Caryophyllia* from California, and a new genus and species of turbinolid coral from Japan. By T. Wayland Vaughan.
pp. 199–203, 1 plate.

P. 1195. Notes on birds collected by Dr. W. L. Abbott in central Asia. By Harry C. Oberholser.
pp. 205–228.

P. 1196. Notes on some birds from Santa Barbara Islands, California. By Harry C. Oberholser.
pp. 229–234.

P. 1197. Catalogue of a collection of birds from Madagascar. By Harry C. Oberholser.
pp. 235–248.

P. 1198. Report on a collection of dipterous insects from Porto Rico. By D. W. Coquillett.
pp. 249–270.

P. 1199. The decapod crustaceans of West Africa. By Mary J. Rathbun.
pp. 271–316, 2 figs.

P. 1200. Description of a new bird of the genus *Dendrornis*. By Charles W. Richmond.
pp. 317–318.

P. 1201. Descriptions of three new birds from lower Siam. By Charles W. Richmond.
pp. 319–321.

P. 1202. On the genera of the chalcid-flies belonging to the subfamily Encyrtinæ. By William H. Ashmead.
pp. 323–412.

P. 1203. A hundred new moths of the family Noctuidæ. By John B. Smith.
pp. 413–495.

P. 1204. A new bird of paradise. By Rolla P. Currie.
pp. 497–499, 1 plate.

P. 1205. Synopsis of the Naiades, or pearly fresh-water mussels. By Charles T. Simpson.
pp. 501–1044, 1 plate.

VOLUME XXIII, CONTAINING PAPERS 1206–1240.

Smithsonian Institution. | United States National Museum. | —— | Proceedings | of the | United States National Museum. | —— | Volume XXIII. | —— | Published under the direction of the Smithsonian Institution. | —— | Washington: | Government Printing Office. | 1901.

8vo., pp. xiv, 1–913, 44 pls., 83 figs.

P. 1206. Classification of the ichneumon flies, or the superfamily Ichneumonoidea. By William H. Ashmead.
pp. 1–220.

P. 1207. A new rhinoceros (*Trigonias osborni*), from the miocene of South Dakota. By Frederic A. Lucas.
pp. 221–223, 2 figs.

P. 1208. New species of moths of the superfamily Tineina from Florida. By August Busck.
pp. 225–254, 1 plate.

P. 1209. Life histories of some North American moths. By Harrison G. Dyar.
pp. 255–284.

P. 1210. Synopsis of the family Tellinidæ and of the North American species. By William H. Dall.
pp. 285–326, 3 pls.

P. 1211. The pelvic girdle of Zeuglodon, *Basilosaurus cetoides* Owen, with notes on other portions of the skeleton. By Frederic A. Lucas.
pp. 327–331, 3 pls.

P. 1212. A new fossil cyprinoid, *Leuciscus turneri*, from the miocene of Nevada. By Frederic A. Lucas.
pp. 333–334, 1 plate.

P. 1213. A list of fishes collected in Japan by Keinosuke Otaki and by the United States steamer *Albatross*, with descriptions of fourteen new species. By David S. Jordan and John O. Snyder.
pp. 335–380, 12 pls.

P. 1214. Synopsis of the family Cardiidæ and of the North American species. By William H. Dall.
pp. 381–392.

P. 1215. Revision of the orthopteran genus *Trimerotropis*. By Jerome McNeill.
pp. 393–449, 1 plate.

P. 1216. The hermit crabs of the *Pagurus bernhardus* type. By James E. Benedict.
pp. 451–466, 6 figs.

P. 1217. On a new species of spiny-tailed iguana from Utilla Island, Honduras. By Leonhard Stejneger.
pp. 467–468.

P. 1218. A new systematic name for the yellow boa of Jamaica. By Leonhard Stejneger.
pp. 469–470.

P. 1219. Diagnosis of a new species of iguanoid lizard from Green Cay, Bahama Islands. By Leonhard Stejneger.
p. 471.

P. 1220. On the wheatears (*Saxicola*) occurring in North America. By Leonhard Stejneger.
pp. 473–481, 1 diagram.

P. 1221. List of fishes collected in the river Pei-Ho, at Tien-Tsin, China, by Noah Fields Drake, with descriptions of seven new species. By James Francis Abbott.
pp. 483–491, 7 pls.

P. 1222. Key to the isopods of the Atlantic coast of North America with descriptions of new and little known species. By Harriet Richardson.
pp. 493–579, 38 figs.

P. 1223. Some spiders and other arachnida from southern Arizona. By Nathan Banks.
pp. 581–590, 1 plate.

P. 1224. A new dinosaur, *Stegosaurus marshi*, from the lower cretaceous of South Dakota. By Frederic A. Lucas.
pp. 591–592, 2 pls.

P. 1225. New diptera in the U. S. National Museum. By D. W. Coquillett.
pp. 593–618.

P. 1226. A list of the ferns and fern allies of North America north of Mexico, with principal synonyms and distribution. By William R. Maxon.
pp. 619–651.

P. 1227. A systematic arrangement of the families of the diptera. By D. W. Coquillett.
pp. 653–658.

P. 1228. A comparison of the osteology of the jerboas and jumping mice. By Marcus W. Lyon, jr.
pp. 659–668, 3 pls.

P. 1229. Cambrian brachiopoda: *Obolella*, subgenus *Glyptias; Bicia; Obolus*, subgenus *Westonia;* with descriptions of new species. By Charles D. Walcott.
pp. 669–695.

P. 1230. A revision of certain species of plants of the genus *Antennaria*. By Elias Nelson.
pp. 697–713.

P. 1231. Description of a new species of snake from Clarion Island. By Leonhard Stejneger.
pp. 715–717.

P. 1232. On the relationships of the Lutianoid fish, *Aphareus furcatus*. By David S. Jordan and Edwin C. Starks.
pp. 719–723, 2 pls.

P. 1233. A review of the lancelets, hagfishes, and lampreys of Japan, with a description of two new species. By David S. Jordan and John O. Snyder.
pp. 725–734, 1 plate.

P. 1234. The proper names of *Bdellostoma* or *Heptatrema*. By Theodore Gill.
pp. 735–738.

P. 1235. List of fishes collected in 1883 and 1885 by Pierre Louis Jouy and preserved in the United States National Museum, with descriptions of six new species. By David S. Jordan and John O. Snyder.
pp. 739–769, 8 pls.

P. 1236. Four new symmetrical hermit crabs (Pagurids) from the West India region. By James E. Benedict.
pp. 771–778, 7 figs.

P. 1237. Synopsis of the Lucinacea and of the American species. By William H. Dall.
pp. 779–833, 4 pls.

P. 1238. On a slug of the genus *Veronicella* from Tahiti. By T. D. A. Cockerell.
pp. 835–836.

P. 1239. A review of the apodal fishes or eels of Japan, with descriptions of nineteen new species. By David S. Jordan and John O. Snyder.
pp. 837–890, 20 figs.

P. 1240. A review of the cardinal fishes of Japan. By David S. Jordan and John O. Snyder.
pp. 891–913, 2 pls., 10 figs.

IV. BULLETINS OF THE U. S. NATIONAL MUSEUM.

(NOS. 1–50.)

B. 1. Check-list of North American batrachia and reptilia; with a systematic list of the higher groups, and an essay on geographical distribution. Based on the specimens contained in the U. S. National Museum. By Edward D. Cope.

8vo., 1875, pp. 1–104.

B. 2. Contributions to the natural history of Kerguelen Island, made in connection with the American [United States] Transit-of-Venus expedition, 1874–75. By J. H. Kidder, M. D., passed assistant surgeon, U. S. Navy. I. Ornithology. Edited by Dr. Elliott Coues, U. S. A.

8vo., 1875, pp. ix, 1–51.

B. 3. Contributions to the natural history of Kerguelen Island, made in connection with the United States Transit-of-Venus expedition, 1874–75. By J. H. Kidder, M. D., passed assistant surgeon, U. S. Navy. II.

8vo., 1876, pp. 1–122.

B. 4. Birds of southwestern Mexico. Collected by Francis E. Sumichrast for the United States National Museum. Prepared by George N. Lawrence.

8vo., 1875, pp. 1–56.

B. 5. Catalogue of the fishes of the Bermudas. Based chiefly upon the collections of the United States National Museum. By G. Brown Goode, M. A., assistant curator, U. S. National Museum.

8vo., 1876, pp. 1–82.

B. 6. International Exhibition, 1876. Board on behalf of United States executive departments. Classification of the collection to illustrate the animal resources of the United States. A list of substances derived from the animal kingdom, with synopsis of the useful and injurious animals and a classification of the methods of capture and utilization. By G. Brown Goode, M. A., assistant curator, U. S. National Museum.

8vo., 1876, pp, xiii, 1–126.

B. 7. Contributions to the natural history of the Hawaiian and Fanning islands and Lower California, made in connection with the United States North Pacific surveying expedition, 1873–1875. By Thos. H. Streets, M. D., passed assistant surgeon, U. S. Navy.
8vo., 1877, pp. 1–172.

B. 8. Index to the names which have been applied to the subdivisions of the class Brachiopoda excluding the rudistes previous to the year 1877. By W. H. Dall, U. S. Coast Survey.
8vo., 1877, pp. 1–88.

B. 9. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. I. Review of Rafinesque's Memoirs on North American Fishes. By David S. Jordan.
8vo., 1877, pp. 1–53.

B. 10. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. II. A.—Notes on Cottidæ, Etheostomatidæ, Percidæ, Centrarchidæ, Aphododeridæ, Dorysomatidæ, and Cyprinidæ, with revisions of the genera and descriptions of new or little known species. B.—Synopsis of the Siluridæ of the fresh waters of North America. By David S. Jordan.
8vo., 1877, pp. 1–120, 45 pls.

B. 11. Bibliography of the fishes of the Pacific coast of the United States to the end of 1879. By Theodore Gill.
8vo., 1882, pp. 1–73.

B. 12. Contributions to North American ichthyology. Based primarily on the collections of the United States National Museum. III. A.—On the distribution of the fishes of the Alleghany region of South Carolina, Georgia, and Tennessee, with descriptions of new or little known species. By David S. Jordan and Alembert W. Brayton. B.—A synopsis of the family Catostomidæ. By David S. Jordan.
8vo., 1878, pp. 1–237.

B. 13. The flora of St. Croix and the Virgin islands. By Baron H. F. A. Eggers.
8vo., 1879, pp. 1–133.

B. 14. International Exhibition, 1876. Catalogue of the collection to illustrate the animal resources and the fisheries of the United States, exhibited at Philadelphia in 1876 by the Smithsonian Institution and the United States Fish Commission, and forming a part of the United States National Museum. Prepared under the direction of G. Brown Goode.
8vo., 1879, pp. xvi, 1–351.

B. 15. Contributions to the natural history of Arctic America, made in connection with the Howgate Polar expedition, 1877–78. By Ludwig Kumlien, naturalist of the expedition.
8vo., 1879, pp. 1–179.

B. 16. Synopsis of the fishes of North America. By David S. Jordan and Charles H. Gilbert.
8vo., 1882, pp. lvi, 1–1018.

B. 17. On the zoological position of Texas. By Edward D. Cope.
8vo., 1880, pp. 1–51.

B. 18. International Fishery Exhibition, Berlin, 1880. Exhibit of the fisheries and fish culture of the United States of America, at the Internationale Fischerei-Ausstellung, held at Berlin, April 20, 1880, and forming a part of the collections of the National Museum, made by the United States Fish Commission. Prepared under the direction of G. Brown Goode, deputy commissioner.
8vo., 1880, pp. xv, 1–263.

B. 19. Nomenclator Zoologicus. An alphabetical list of all generic names that have been employed by naturalists for recent and fossil animals from the earliest times to the close of the year 1879. In two parts: I. Supplemental list. II. Universal index. By Samuel H. Scudder.
8vo., 1882, pp. xxi, 1–376, 1–340.

B. 20. Bibliographies of American naturalists. I. The published writings of Spencer Fullerton Baird, 1843–1882. By G. Brown Goode, assistant director of the National Museum.
8vo., 1883, pp. xvi, 1–377, frontispiece.

B. 21. Nomenclature of North American birds chiefly contained in the United States National Museum. By Robert Ridgway.
8vo., 1881, pp. 1–94.

B. 22. Guide to the flora of Washington and vicinity. By Lester F. Ward, A. M.
8vo., 1881, pp. 1–264, 1 map.

B. 23. Bibliographies of American naturalists. II. The published writings of Isaac Lea, LL. D. By Newton Pratt Scudder.
8vo., 1885, pp. lix, 1–278, frontispiece.

B. 24. Check list of North American reptilia and batrachia, with catalogue of specimens in U. S. National Museum. By H. C. Yarrow, M. D., honorary curator, department of reptiles.
8vo., 1882, pp. v, 1–249.

B. 25. Contributions to the natural history of the Bermudas. Edited by J. Matthew Jones and George Brown Goode.
8vo., 1884, pp. xxiii, 1–353, 12 pls.

Part I.—Geology. By Prof. William North Rice (pp. 1–32, 5 pls.).
Part II.—Botany. By Gen. Sir John Henry Lefroy (pp. 33–141).
Part III.—Mammals. By J. Matthew Jones (pp. 143–161).
Part IV.—Birds. By Capt. Savile G. Reid (pp. 163–279).
Part V.—Notes on birds. By Dr. C. Hart Merriam (pp. 281–284).
Part VI.—Reptiles. By Samuel Garman (pp. 285–303).
Part VII.—Annelids. By Prof. H. E. Webster (pp. 305–327, 6 pls.).

B. 26. Avifauna Columbiana: being a list of birds ascertained to inhabit the District of Columbia, with the times of arrival and departure of such as are non-residents, and brief notices of habits, etc. The second edition, revised to date, and entirely rewritten. By Elliott Coues, M. D., Ph. D., professor of anatomy in the National Medical College, etc., and D. Webster Prentiss, A. M., M. D., professor of materia medica and therapeutics in the National Medical College, etc.

8vo., 1883, pp. 1–133, 2 pls., 100 figs.

B. 27. Great International Fisheries Exhibition, London, 1883. Descriptive catalogues of the collections sent from the United States to the International Fisheries Exhibition, London, 1883, constituting a report upon the American section. Prepared under the direction of G. Brown Goode, U. S. commissioner, and a staff of associates.

8vo., 1884, pp. liv, 1–1279.

Great international fisheries exhibition. London, 1883. United States of America. A. Preliminary catalogue and synopsis of the collections exhibited by the United States Fish Commission and by special exhibitors. With a concordance to the official classification of the exhibition. 8vo., 1883, pp. 1–105.

Great international fisheries exhibition. London, 1883. United States of America. B. Collection of economic crustaceans, worms, echinoderms, and sponges. By Richard Rathbun, curator of the department of marine invertebrates in the United States National Museum. 8vo., 1883, pp. 107–137.

Great international fisheries exhibition. London, 1883. United States of America. C. Catalogue of the aquatic and fish-eating birds exhibited by the United States National Museum. By Robert Ridgway, curator, department of birds, U. S. National Museum. 8vo., 1883, pp. 139–184.

Great international fisheries exhibition. London, 1883. United States of America. D. Catalogue of the economic mollusca and the apparatus and appliances used in their capture and preparation for market, exhibited by the United States National Museum. By Lieut. Francis Winslow, U. S. Navy. 8vo., 1883, pp. 185–270.

Great international fisheries exhibition. London, 1883. United States of America. E. The whale fishery and its appliances. By James Temple Brown, assistant in the department of art and industry, U. S. National Museum. 8vo., 1883, pp. 271–386.

Great international fisheries exhibition. London, 1883. United States of America. F. Catalogue of the collections of fishes exhibited by the United States National Museum. By Tarleton H. Bean, curator of the department of fishes in the United States National Museum. 8vo., 1883, pp. 387–510.

Great international fisheries exhibition. London, 1883. United States of America. G. Descriptive catalogue of the collection illustrating the scientific investigation of the sea and fresh waters. By Richard Rathbun, curator of the department of marine invertebrates in the United States National Museum. 8vo., 1883, pp. 511–621.

Great international fisheries exhibition. London, 1883. United States of America. H. Catalogue of the aquatic mammals exhibited by the United States National Museum. By Frederick W. True, curator of the department of mammals, United States National Museum. 8vo., 1884, pp. 623–644.

Great international fisheries exhibition. London, 1883. United States of America. I. Catalogue of the collection illustrating the fishing vessels and boats, and their equipment; the economic condition of fishermen; anglers' outfits, etc. By Capt. J. W. Collins, assistant, U. S. Fish Commission. 8vo., 1884, pp. 645–823.

Great international fisheries exhibition. London, 1883. United States of America. J. Catalogue of the apparatus for the capture of fish exhibited by the United States National Museum. By R. Edward Earll, curator of the fisheries collections, U. S. National Museum, and assistant U. S. Fish Commission. 8vo., 1884, pp. 825–1030.

Great international fisheries exhibition. London, 1883. United States of America. K. Catalogue of fishery products, and of the apparatus used in their preparation. By A. Howard Clark, assistant in the department of art and industry, United States National Museum. 8vo., 1884, pp. 1031–1154.

Great international fisheries exhibition. London, 1883. United States of America. L. Catalogue of the fish-cultural exhibit of the United States Fish Commission. By R. Edward Earll, curator of the fisheries collections, U. S. National Museum, and assistant, U. S. Fish Commission. 8vo., 1884, pp. 1155–1249.

B. 28. A manual of American land shells. By W. G. Binney.
8vo., 1885, pp. 1–528, 516 figs.

B. 29. Results of ornithological explorations in the Commander Islands and in Kamtschatka. By Leonhard Stejneger.
8vo., 1885, pp. 1–382, 8 pls., 7 figs., 1 map.

B. 30. Bibliographies of American naturalists. III. Bibliography of publications relating to the collection of fossil invertebrates in the United States National Museum, including complete lists of the writings of Fielding B. Meek, Charles A. White,[1] and Charles D. Walcott. By John Belknap Marcou.
8vo., 1885, pp. 1–333.

B. 31. Bulletin of the United States National Museum. No. 31. Synopsis of the North American Syrphidæ. By Samuel W. Williston, M. D., Ph. D.
8vo., 1886, pp. xxx, 1–335, 12 pls.

B. 32. Catalogue of batrachians and reptiles of Central America and Mexico. By E. D. Cope.
8vo., 1887, pp. 1–98.

B. 33. Catalogue of minerals and synonyms. By T. Egleston, Ph. D.
8vo., 1887, pp. 1–198.

B. 34. The batrachia of North America. By E. D. Cope.
8vo., 1889, pp. 1–525, 86 pls., 119 figs.

---

[1] For supplementary list, see P. 1135.

B. 35. Bibliographical catalogue of the described transformations of North American lepidoptera. By Henry Edwards.
8vo., 1889, pp. 1–147.

B. 36. Contributions to the natural history of the cetaceans. A review of the family Delphinidæ. By Frederick W. True, curator of the department of mammals, United States National Museum.
8vo., 1889, pp. 1–191, 47 pls.

B. 37. A preliminary catalogue of the shell-bearing marine mollusks and brachiopods of the south-eastern coast of the United States, with illustrations of many of the species. By William Healey Dall, A. M., honorary curator, department of mollusks, U. S. National Museum.
8vo., 1889, pp. 1–221, 74 pls.

B. 38. Contribution toward a monograph of the insects of the lepidopterous family Noctuidæ of temperate North America. Revision of the species of the genus *Agrotis*. By John B. Smith, professor of entomology, Rutgers College, New Jersey.
8vo., 1890, pp. iv, 1–237, 5 pls.

B. 39. [Directions for collecting and preserving specimens.]

Part A.—Directions for collecting birds. By Robert Ridgway. 8vo., 1891, pp. 1–27, 9 figs.

Part B.—Directions for collecting recent and fossil plants. By F. H. Knowlton (with notes on collecting and preserving fresh-water algæ, by Frank S. Collins). 8vo., 1891, pp. 1–46, 10 figs.

Part C.—Notes on the preparation of rough skeletons. By Frederic A. Lucas. 8vo., 1891, pp. 1–11, 12 figs.

Part D.—Directions for collecting, preparing, and preserving birds' eggs and nests. By Charles Bendire. 8vo., 1891, pp. 1–10, 7 figs.

Part E.—Directions for collecting reptiles and batrachians (with supplementary note giving directions for preserving small herpetological specimens in formalin). By Leonhard Stejneger. 8vo., 1891, pp. 1–13, 5 figs.

Part F.—Directions for collecting and preserving insects. By C. V. Riley, M. A., Ph. D. 8vo., 1892, pp. 1–147, 1 plate, 139 figs.

Part G.—Instructions for collecting mollusks, and other useful hints for the conchologist. By William H. Dall. 8vo., 1892, pp. 1–56, 8 figs.

Part H.—Directions for collecting minerals. By Wirt Tassin. 8vo., 1895, pp. 1–6, 8 figs.

Part I.—Directions for collecting rocks and for the preparation of thin sections. By George P. Merrill. 8vo., 1895, pp. 1–15, 17 figs.

Part J.—Directions for collecting specimens and information illustrating the aboriginal uses of plants. By Frederick V. Coville. 8vo., 1895, pp. 1–8.

Part K.—Directions for collecting and preparing fossils. By Charles Schuchert. 8vo., 1895, pp. 1–31, 13 figs.

Part L.—Directions for collecting and preserving scale insects (Coccidæ). By T. D. A. Cockerell. 8vo., 1897, pp. 1–9.

Part M.—The methods employed at the Naples Zoological Station for the preservation of marine animals. By Dr. Salvatore Lo Bianco. Translated from the original Italian by Edmund Otis Hovey. 8vo., 1899, pp. 1–42, frontispiece.

Part N.—Directions for preparing study specimens of small mammals. By Gerrit S. Miller, jr. 8vo., 1899, pp. 1–10, 1 fig.

Part N.—Second edition, revised, with abstracts in German, French, and Spanish. 8vo., 1901, pp. 1–25, 3 figs.

Part O.—Directions for collecting and rearing dragonflies, stoneflies, and mayflies. By James G. Needham, Ph. D. 8vo., 1899, pp. 1–9, 4 figs.

B. 40. Bibliographies of American naturalists. IV. The published writings of George Newbold Lawrence, 1844–1891. By L. S. Foster.

8vo., 1892, pp. xi, 1–124, frontispiece.

B. 41. Bibliographies of American naturalists. V. The published writings of Dr. Charles Girard. By George Brown Goode.

8vo., 1891, pp. vi, 1–141, frontispiece.

B. 42. A preliminary descriptive catalogue of the systematic collections in economic geology and metallurgy in the United States National Museum. By Frederic P. Dewey.

8vo., 1891, pp. xviii, 1–256, 34 pls., 10 figs.

B. 43. A monograph of the bats of North America. By Harrison Allen, M. D.

8vo., 1893, pp. ix, 1–198, 38 pls., 1 diagram.

B. 44. A catalogue, bibliographical and synonymical, of the species of moths of the lepidopterous superfamily Noctuidæ, found in boreal America, with critical notes. By John B. Smith, Sc. D.

8vo., 1893, pp. 1–424.

B. 45. A monograph of the North American Proctotrypidæ. By William H. Ashmead.

8vo., 1893, pp. 1–472, 18 pls., 2 figs.

B. 46. The myriapoda of North America. By Charles Harvey Bollman. Edited by L. M. Underwood.

8vo., 1893, pp. 1–210.

B. 47. The fishes of North and Middle America: A descriptive catalogue of the species of fish-like vertebrates found in the waters of North America, north of the Isthmus of Panama. By David Starr Jordan, Ph. D., president of the Leland Stanford Junior University, and Barton Warren Evermann, Ph. D., ichthyologist of the United States Fish Commission.

8vo., 4 vols., pp. 1–3313, 392 pls.

Part I.—1896, pp. lx, 1–1240.

Part II.—1898, pp. xxx, 1241–2183.

Part III.—1898, pp. xxiv, 2183*a*–3136.

Part IV.—1900, pp. ci, 3137–3313; 392 pls.

B. 48. Contributions toward a monograph of the insects of the lepidopterous family Noctuidæ of boreal North America. A revision of the deltoid moths. By John B. Smith, Sc. D., professor of entomology in Rutgers College.

8vo., 1895, pp. i–vi, 1–129, 14 pls.

B. 49. The published writings of Philip Lutley Sclater, 1844–1896. Prepared under the direction of G. Brown Goode.

8vo., 1896, pp. xix, 1–135, frontispiece.

B. 50. The birds of North and Middle America: A descriptive catalogue of the higher groups, genera, species, and subspecies of birds known to occur in North America, from the Arctic lands to the Isthmus of Panama, the West Indies and other islands of the Caribbean Sea, and the Galapagos Archipelago. By Robert Ridgway, curator, division of birds. Part I. Family Fringillidæ—The Finches.

8vo., 1901, pp. i–xxx, 1–715, 20 pls. (Additional parts in preparation.)

V. SPECIAL BULLETINS OF THE U. S. NATIONAL MUSEUM.

(NOS. I–IV.)

I. Smithsonian Institution. | United States National Museum. | Special Bulletin No. 1. | —— | Life histories | of | North American birds | with special reference to | their breeding habits and eggs, | with | twelve lithographic plates. | By | Charles Bendire, captain, U. S. Army (retired), | Honorary Curator of the Department of Oölogy, U. S. National Museum, | member of the American Ornithologists' Union. | —— | Washington: | Government Printing Office | 1892.

4to., pp. viii, 1–446, 12 pls.

II. Smithsonian Institution. | United States National Museum. | —— | Special Bulletin. | —— | Oceanic Ichthyology, | a treatise on the | deep-sea and pelagic fishes of the world, | based chiefly upon | the collections made by the steamers Blake, Albatross, | and Fish Hawk in the Northwestern Atlantic, | with | an atlas containing 417 figures. | By | George Brown Goode, Ph. D., LL. D., | Assistant Secretary, Smithsonian Institution, in charge of U. S. National Museum, | and | Tarleton H. Bean, M. D., M. S., | Director of the New York Aquarium. | —— | Washington: | Government Printing Office. | 1895.

4to., Vol. I, pp. xxxv, 1–553, 24 figs., 1 diagram; Vol. II, pp. xxiii, 1–26, 123 pls.

III. Smithsonian Institution. | United States National Museum. | Special Bulletin. | —— | Life histories | of | North American birds, | from the parrots to the grackles, | with special reference to | their breeding habits and eggs, | By | Charles Bendire, captain and brevet major, U. S. A. (retired), | Honorary Curator of the Department of Oölogy, U. S. National Museum | member of the American Ornithologists' Union. | with | seven lithographic plates. | —— | Washington: | Government Printing Office. | 1895.

4to., pp. ix, 1–518, 7 pls.

IV. Smithsonian Institution. | United States National Museum. | —— | Special Bulletin. | —— | American Hydroids. | —— | Part I. | The Plumularidæ, | with thirty-four plates. | By | Charles Cleveland Nutting, | Professor of Zoology, University of Iowa. | —— | Washington: | Government Printing Office. | 1900.

4to., pp. ii, 1–285, 34 pls., 124 figs.

VI. CIRCULARS OF THE U. S. NATIONAL MUSEUM.[1]

(NOS. 1–50.)

C. 1. Organization of the U. S. National Museum. By G. Brown Goode.
8vo., 1881, pp. 1–58.

C. 2. Circular addressed to friends of the Museum. By Spencer F. Baird.
8vo., 1881, pp. 1–2.

C. 3. Circular in reference to petroleum collections. By Spencer F. Baird.
8vo., 1881, pp. 1–2.

C. 4. Circular concerning the department of insects. By Spencer F. Baird.
8vo., 1881, 1 page.

C. 5. Establishment and officers.
8vo., 1881, pp. 1–2.

C. 6. Classification and arrangement of the materia medica collection. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–2.

C. 7. A classification of the forms in which drugs and medicines appear and are administered. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–7.

C. 8. Memoranda for collectors of drugs for the materia medica section of the National Museum. By James M. Flint, U. S. N.
8vo., 1881, pp. 1–2.

C. 9. Circular in reference to the building-stone collection. By Spencer F. Baird.
8vo., 1881, pp. 1–6.

C. 10. Two letters on the work of the National Museum. By Barnet Phillips.
8vo., 1881, pp. 1–10.

C. 11. A provisional classification of the food collections. By G. Brown Goode.
8vo., 1881, pp. 1–22.

---

[1] Circulars 1–18 reprinted in Proceedings U. S. National Museum, Volume IV.
Circulars 19–23 reprinted in Proceedings U. S. National Museum, Volume VI.
Circulars 24–31 reprinted in Proceedings U. S. National Museum, Volume VII.
Circulars 32 33 reprinted in Proceedings U. S. National Museum, Volume VIII.
Circular 35 reprinted in Report U. S. National Museum, 1886, p. 25.
Circular 37 reprinted in Proceedings U. S. National Museum, Volume X.

C. 12. Classification of the collection to illustrate the art of taxidermy. By William T. Hornaday.
8vo., 1881, pp. 1–2.

C. 13. Outline of a scheme of museum classification. By G. Brown Goode.
8vo., 1881, pp. 1–4.

C. 14. Circular requesting material for the library. By Spencer F. Baird.
8vo., 1881, pp. 1–3.

C. 15. The organization and objects of the National Museum.
8vo., 1881, pp. 1–4.

C. 16. Plans for the installation of collections.
8vo., 1881, pp. 1–2.

C. 17. Contributions and their acknowledgment.
8vo., 1881, 1 page.

C. 18. List of publications of the United States National Museum.
8vo., 1881, pp. 1–12.

C. 19. Classification of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint, U. S. N.
8vo., 1883, pp. 1–45.

C. 20. Request for specimens of drugs and information concerning them. By Spencer F. Baird.
8vo., 1883, 1 page.

C. 21. Circular relative to contributions of aboriginal antiquities to the U. S. National Museum. By Charles Rau.
8vo., 1883, 5 pp.

C. 22. Brief directions for removing and preserving the skins of mammals. By William T. Hornaday.
8vo., 1883, 7 pp., 1 figs.

C. 23. Instructions for taking paper molds of inscriptions in stone, wood, bronze, etc. Prepared by A. P. Niblack, U. S. N.
8vo., 1883, 5 pp.

C. 24. Plan of a collection to illustrate the textile industries of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By Romyn Hitchcock.
8vo., 1884, pp. 1–16.

C. 25. Preliminary plan for a collection of the building and ornamental stones and rocks of the United States, to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By George P. Merrill.
8vo., 1884, pp. 1–2.

C. 26. Plan for a collection of gems and precious stones, to be exhibited at the Cincinnati Industrial Exposition and the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By F. W. Clarke.
8vo., 1884, pp. 1–2.

C. 27. Directions for collecting, preserving, and transporting tortricids and other small moths. By C. H. Fernald.
8vo., 1884, pp. 1–3.

C. 28. Directions for mound exploration. By Cyrus Thomas.
8vo., 1884, pp. 1–3.

C. 29. Provisional plan for a collection of mammals to be exhibited at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By Frederick W. True.
8vo., 1884, pp. 1–27.

C. 30. A list of birds the eggs of which are wanted to complete the series in the National Museum, with instructions for collecting eggs. By Charles E. Bendire, U. S. A.
8vo., 1884, 4 pp.

C. 31. Plan to illustrate the mineral resources of the United States and their utilization, at the World's Industrial and Cotton Centennial Exposition of 1884–85, at New Orleans. By Fred. P. Dewey.
8vo., 1884, 8 pp.

C. 32. Classification of the materia medica collection of the U. S. National Museum, and catalogue of specimens. By James M. Flint, U. S. N. (Revised and extended by Dr. Henry G. Beyer, U. S. N.)
8vo., 1885, pp. 1–39.

C. 33. Notes on the preparation of rough skeletons. By Frederic A. Lucas.
8vo , 1885, pp. 1–8, 12 figs.

C. 34. Circular for the guidance of persons desiring to make exchanges of birds or birds' eggs with the National Museum.
8vo., 1886, 1 page.

C. 35. Concerning the lending of type specimens. By Spencer F. Baird.
8vo., 1886, 1 page.

C. 36. Circular concerning the department of antiquities. By S. P. Langley.
8vo., 1887, 6 pp., 17 figs.

C. 37. Catalogue of the contributions of the section of graphic arts to the Ohio Valley Centennial Exposition, Cincinnati, Ohio, 1888. By S. R. Koehler.
8vo., 1887, 31 pp.

C. 38. Contributions of the department of transportation and engineering to the Ohio Valley Centennial Exposition, 1888. By J. Elfreth Watkins.
8vo., 1888, pp. 1–18.

C. 39. The contribution of the section of oriental antiquities to the Ohio Valley Centenial Exposition. By Cyrus Adler.
8vo., 1888, pp. 1–7.

C. 40. Description of exhibit made by the department of prehistoric anthropology in the National Museum at the Ohio Valley and Central States Exposition in Cincinnati, Ohio, 1888. By Thomas Wilson.

8vo., 1888, pp. 1–33, 50 figs.

C. 41. Guide to a collection illustrating the families of mammals, exhibited in the Ohio Valley Centennial Exposition in 1888 by the U. S. National Museum. By Frederick W. True.

8vo., 1888, pp. 1–26.

C. 42. Circular relating to prehistoric anthropology. By Thomas Wilson.

8vo., 1888, pp. 1–16, 1 figs.

C. 43. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing accessions for the library.]

8vo., 1891, 1 page.

C. 44. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing publications for the library in exchange.]

8vo., 1894, pp. 1–8.

C. 45. To the correspondents of the U. S. National Museum. By G. Brown Goode. [With a view to securing authors' separates and reprints for the library.]

8vo., 1894, 1 page.

C. 46. [Regarding the proposed revision of Bulletin 22, relating to the flora of the District of Columbia.] By G. Brown Goode.

8vo., 1895, 2 pp.

C. 47. Circular in regard to the identification of specimens of mollusks by the National Museum. By G. Brown Goode.

8vo., 1895, 2 pp.

C. 48. Circular in regard to bones and teeth of the mastodon and mammoth. By Frederic A. Lucas.

8vo., 1897, pp. 1–4, 2 figs.

C. 49. [Circular relating to the North American Violaceæ.] By Frederick W. True.

8vo., 1899, 1 page.

C. 50. [Circular transmitting questions relating to birds and birds' eggs.] By Richard Rathbun.

8vo., 1901, 3 pp.

VII.—INDEX TO TITLES IN PRECEDING LIST.

[In the references the following abbreviations are used: R.=paper printed in the Reports; P.=paper printed in the Proceedings; B.=Bulletin; Sp. B.=Special Bulletin; C.=Circular. The references under certain special headings, such as U. S. Fish Commission, etc., are necessarily incomplete, as this is only an index of *titles*. References to persons whose names occur in the titles, but who are not themselves the authors of the papers, are placed in brackets.]

A.

Abbott, James F ..... P. 1221
Abbott, W. L ..... R. 56, P. 973
[Abbott, Dr. W. L.] ..... P. 915, P. 970, P. 976, P. 979, P. 982, P. 983, P. 1008, P. 1046, P. 1062, P. 1064, P. 1065, P. 1078, P. 1079, P. 1083, P. 1118, P. 1195
Aboriginal American harpoons ..... R. 117
antiquities, relating to contributions of ..... C. 21
stone relics, requesting information concerning ..... C. 36
Aborigines, American, basket work of the. R. 2
cradles of the ..... R. 16
overlaying with copper by ..... P. 1015
pipes and smoking customs ..... R. 103
Abrolhos Islands. Birds ..... P. 768
Birds and skeletons. P. 798
Adler, Cyrus ..... R. 66, R. 80, R. 81, P. 936, C. 39
Adler, Cyrus (coauthor) ..... R. 100, R. 115
Africa. Crustaceans, new species. Congo P. 980
Ethnology ..... R. 81
Myriapods ..... P. 968
(Gomphodesmidæ) .. P. 1170
(Pachybolus) ..... P. 1168
East. Anthropology ..... R. 56
Insects (Coleoptera) ..... P. 1094
(Lepidoptera) ... P. 1062, P. 1063, P. 1064, P. 1098
(Odonata). P. 1046, P. 1047
Lygosoma kilimensis .... P. 862
Mammals ..... P. 814, P. 915
Mammals from Tana River ..... P. 954
Myriapods (diplopod) ... P. 1042
Reptiles ..... P. 862, P. 857
Reptiles and batrachians. P. 970
West (Cameroons district)—
Birds ..... P. 1185
Crustaceans collected by U. S. Eclipse expedition. P. 949
Crustaceans (decapod) .... P. 1199
Insects, Arachnids and Myriapods ..... P. 951
Africa, West. Mollusks collected by U. S. Eclipse expedition ..... P. 940
African sword blades, corrugation in ..... P. 703
Agriculture, Department of, shells received from ..... P. 844
Ainos of Yezo, Japan ..... R. 50
Alabama. Fishes ..... P. 585
Fossil plants ..... P. 688
Fossils (Eocene) ..... P. 1164
Alaska. Annelids ..... P. 459
Birds ... P. 274, P. 329, P. 411, P. 412, P. 960
Botany ..... P. 397, P. 513, P. 772
Crustaceans ..... P. 459
decapod ... . P. 455
Ethnology ..... R. 89, P. 364
of Coast Indians ..... P. 718
Fishes ..... P. 47, P. 59, P. 70, P. 80, P. 100, P. 121, P. 210, P. 225, P. 233, P. 255, P. 342, P. 387, P. 407, P. 487, P. 748, P. 753, P. 795, P. 1027, P. 1167
Fossil plants ..... P. 300, P. 679, P. 998
Hydroids ..... P. 1171
Mammals ..... P. 399, P. 495, P. 564
Mollusks ..... P. 1, P. 48
Whitefish, new species of ..... P. 748
"Albatross,"[1] birds collected on Cozumel Island by ..... P. 539
Brachyurans dredged by ... P. 1162
Echini taken by ..... P. 491
from Gulf of Mexico obtained by ..... P. 541
Fishes collected by ..... P. 1115
(Japan). P. 1213
Foraminifera dredged by, catalogue of ..... R. 102
Medusæ collected by ..... P. 528
Scientific results of explorations[2]—
(No. I, birds) ..... P. 767
(No. II, birds) ..... P. 768
(No. III, batrachians and reptiles) ..... P. 769
(No. IV, fishes) ..... P. 770
(No. V, insects) ..... P. 771
(No. VI, plants) ..... P. 772
(No. VII, mollusks and brachiopods) ..... P. 773

[1] For a complete list of papers relating to the work of the "Albatross" see "Dredging and other records of the 'Albatross,' with bibliography relative to the work of the vessel," compiled by C. H. Townsend and published in the Report of the U. S. Fish Commission for 1900.

[2] In addition to the above-numbered series the following papers, printed in the Proceedings subsequent to Volume XVIII, are based wholly or in part on "Albatross" collections: Nos. 1114, 1115, 1161, 1162, 1213, 1236, 1239, 1241, 1244, 1259, 1261.

"Albatross." Scientific results of explorations—Continued.
(No. VIII, fishes) ..... P. 787
(No. IX, fishes) ..... P. 789
(No. X, fossils) ..... P. 793
(No. XI, fishes) ..... P. 795
(No. XII, fishes) ..... P. 797
(No. XIII, bird skeletons) ..... P. 798
(No. XIV, birds) ..... P. 799
(No. XV, reptiles) ..... P. 800
(No. XVI, plants) ..... P. 801
(No. XVII, mollusks) ... P. 813
(No. XVIII, fishes) ..... P. 829
(No. XIX, fishes) ..... P. 840
(No. XX, mollusks) .... P. 849
(No. XXI, fishes) ..... P. 856
(No. XXII, fishes) ..... P. 880
(No. XXIII, cœlentarates) ..... P. 930
(No. XXIV, crustaceans) P. 933
(No. XXV, mollusks) ... P. 942
(No. XXVI, mollusks) .. P. 943
(No. XXVII, birds) ..... P. 960
(No. XXVIII, fishes) ... P. 1012
(No. XXIX, fishes) ..... P. 1013
(No. XXX, fishes) ..... P. 1014
(No. XXXI, crustaceans) ..... P. 1016
(No. XXXII, crustaceans) ..... P. 1017
(No. XXXIII, fishes) ... P. 1030
(No. XXXIV, mollusks and brachiopods) .... P. 1032
Stalked crinoids, from Gulf of Mexico and Caribbean Sea, obtained by ..... P. 547
Albinism, remarks on ..... P. 733
Aldabra Island. Birds ..... P. 953, P. 1008, P. 1079
Birds' nests and eggs .. P. 983
Fruit bat, new species of P. 948
Insects (Lepidoptera) .. P. 1064
Insects ..... P. 1119
Natural history of ..... P. 973
Pteropus aldabrensis (n. sp.) ..... P. 948
Allen, Harrison ..... P. 786, P. 807, P. 824, P. 912, P. 913, P. 914, P. 919, P. 920, P. 1099, P. 1100, B. 43
Allen, J. A ..... P. 850
Amazon (Lower) birds ..... P. 591, P. 618, P. 660
American aborigines. Basket work of .. R. 2
Cradles of the ... R. 16
Overlaying with copper by ..... P. 1015
Pipes and smoke-customs of the. R. 103
Amirantes Island birds ..... P. 1079
"Analyse de la nature," of Rafinesque, note on ..... P. 648
Analysis of water destructive to fish ..... P. 201
Anatomical preparations, protection of .. P. 12
Semper's method of making ..... P. 220
Anatomy. Amphipnoidæ, osteological characteristics of the ..... P. 825
Anguillidæ, osteological characteristics of ..... P. 803
Anseres, North American, osteology of the ..... P. 711
Bird skeletons collected by "Albatross," 1887-88 ..... P. 798
Birds' sterna and skulls ..... P. 638
Canada lynx, cranial character of the ..... P. 603
Chamæa, osteology of ..... P. 830
Cœrebidæ, anatomy and affinities of ..... P. 1001
Cygninæ, outlines of monograph of the ..... P. 275
Dactylopteroidea, osteological characteristics of ..... P. 818
Dinolestes lewini, osteology of ..... P. 1186
Etheostomatinæ, on skeletons of ..... P. 484
Eurypharyngidæ, anatomy of. P. 382
Feather tracts of North American grouse and quail ..... P. 1166
Fishes ..... P. 382
Fishes, development of fin-rays of ..... P. 553
Great auk, observations on the history and anatomy of the. R. 26
Hemitripteridæ, osteological characteristics of the ..... P. 835
Humming birds, structure of tongue in ..... P. 848
Hydrocotyle americana ..... P. 741
Jerboas and jumping mice, osteology of the ..... P. 1228
Lutjaninæ, osteological characteristics of the ..... P. 444
Murænesocidæ, osteological characteristics of ..... P. 815
Murænidæ, osteological characteristics of ..... P. 805
Nothura maculosa, osteology of ..... P. 622
Opheosaurus ventralis, on the osteology of ..... P. 245
Pallas's cormorant, cranium of ..... P. 1095
Paridæ, osteology of the ..... P. 830
Patella in birds, forms of ..... P. 439
Persesoces, osteological characters of ..... P. 1179
Phoca fasciata, skeleton of ... P. 394
Procniatidæ, osteological and pterylographical character of ..... P. 1077
Prodelphinus, skeletons and skulls of ..... P. 982
Pterylography of American goat-suckers and owls ..... P. 1018
Rancipitidæ, osteological characteristics of ..... P. 816
Simenchelyidæ, osteological characteristics of ..... P. 817

Anatomy. Sitta, osteology of the ..... P. 830
Skeletons, notes on the preparation of ..... B. 39 (c), C. 33
Steganopodes, osteology of the ..... P. 713
Synaphobranchidæ, osteological characteristics of the .. P. 804
Thrushes and wrens, osteology of the ..... P. 704
Tubinares, osteology of the .. P. 713
Turbinella pyrum ..... P. 521
Zeidæ, osteology of the ..... P. 1155
Ancient Indian matting from Petit Anse Island, Louisiana ..... R. 30
relics in Japan ..... R. 60
Andrews, E. A ..... P. 852
Angel de la Guardia Island, new species of lizard from ..... P. 864
Animal resources and fisheries of the United States, catalogue of collection to illustrate ..... B. 14
Animal resources of the United States, classification of collection to illustrate the ..... B. 6
Annelids. Alaska, new species of worm from ..... P. 459
Leeches in collection of National Museum ..... P. 1160
Northeastern coast. P. 76, P. 168, P. 534
Point Barrow expedition .... P. 459
(Polychæta). North Carolina ..... P. 852
Serpulidæ ..... P. 594
U. S. Fish Commission, from dredgings of ..... P. 594
Worms, London Fisheries Exhibition ..... B. 27 (B)
Anthozoans, northeastern coast ..... P. 76
Anthropology.[1] Aboriginal American harpoons ..... R. 117
Aboriginal skin-dressing ..... R. 38
Aborigines, American, overlaying with copper by ..... P. 1015
Africa ..... R. 84
Africa, East ..... R. 56
African sword blades, corrugation in ..... P. 703
Ainos of Yezo ..... R. 50
Alaska ..... R. 89
coast Indians of. P. 718
Alaskan Innuit, jadeite implements ..... P. 395
Ancient Indian matting ..... R. 30
relics in Japan R. 60
Anthropological publications of Charles Rau ..... P. 253
Anthropological studies in California ..... R. 116
Antiquity of the red race in America ..... R. 96
Arrowpoints, spearheads, and knives.... R. 108
Anthropology. Artificial deformation of children ..... R. 17
Basket work of North American aborigines .. R. 2
Benguiat collection in the National Museum, catalogue of ..... R. 115
Bernadou, Allen and Jouy Korean collections ..... R. 57
Biblical antiquities ..... R. 100
Boomerang, study of the. P. 724
Bronze Buddha in the National Museum ..... R. 43
Burial mounds of Japan. R. 59
California, anthropological studies in ..... R. 116
California, throwing sticks from ..... P. 932
Carthage, Roman mosaic. P. 393
Casts of heads of Indian prisoners ..... P. 29
Catlin collection of Indian paintings ..... R. 8, R. 52
Ceramic art in China, sketch of ..... R. 118
Chaclacayo trephined skull ..... P. 531
Chess and playing cards. R. 99
Chinese games with dice and dominoes. R. 74
porcelains, Hippisley collection of.... R. 25, R. 118
relics in Alaska. P. 899
Chinnook names of salmon ..... P. 244
Cloth from Ohio mound. P. 347
Coast Indians of southern Alaska and northern British Columbia ..... R. 24
Cradles of American aborigines ..... R. 16
Crump burial cave ..... R. 67
District of Columbia, stone implements from P. 810
Early West Virginia pottery ..... R. 113
Easter Island ..... R. 37, R. 105
Eskimo bows, study of... R. 3
collection, preliminary catalogue of the... R. 20
harpoon ..... P. 702
lamp ..... R. 101
Eskimo, graphic art of the ..... R. 90
Ethno-conchology—a study of primitive money ..... R. 19
Fire-making apparatus.. R. 27
methods of. R. 47
Florida, east coast, shell heaps of ..... P. 966
Fort Marion, Florida, casts of heads of Indian prisoners at ..... P. 29

[1] Under this heading will be found references to all papers on ethnology, archæology, and technology.

Anthropology. George Catlin Indian gallery ..... R. 8
Golden patera of Rennes. R. 85
Graphic art of the Eskimo ..... R. 90
Hampton Normal and Agricultural Institute, list of Indian boys and girls at ..... P. 79
Harpoons, aboriginal American ..... R. 117
Havasu-pai Indians ..... P. 859
Hopi ceremonial pigments ..... R. 120
Human beast of burden .. R. 18
Ii Kamon-no-Kami Naosuké, wooden statue of ..... R. 86
India, minute stone implements from ..... R. 68
Indian boys and girls, list of ..... P. 79
Indian paintings, Catlin ..... R. 8, R. 52
Indians, Alaska and British Columbia ..... R. 24
Havasu-pai ... P. 859
Kwakiutl .... R. 89
Jadeite implements, Alaskan Innuit ..... P. 395
Japan .... R. 58, R. 59, R. 60, P. 836
Japanese wood-cutting and wood-cut printing. R. 63
Jewish ceremonial objects in National Museum, catalogue of ..... R. 115
Kilima-njaro, ethnological collections from ... R. 56
Korean mortuary pottery R. 28
Kutenai canoe ..... R. 114
Kwakiutl Indians, houses of ..... P. 709
Kwakiutl Indians, social organization and secret societies of the ..... R. 89
Lamp of the Eskimo ..... R. 101
Log of the Savannah .... R. 53
Man in North America during paleolithic period of stone age ..... R. 31
Mancala, the national game of Africa ..... R. 84
Man's knife of North American Indians ..... R. 106
Mexico, throwing-sticks. P. 932
Mound exploration, directions for ..... C. 28
Musical scales, history of. R. 119
Naskopie Indians, single-headed drum of ..... P. 736
Navajo belt weaver ..... P. 860
Navajo Indians, evolution of house building. P. 902
Navajo shoemaker ..... P. 697
Navajo tanner ..... P. 683
Naval architecture ..... R. 61

Anthropology. New Brunswick, shell-mounds on coast of .... P. 229
New England, shell-mounds on coast of .... P. 229
New York ..... P. 351
Norsk naval architecture P. 583
Ohio, cloth from mound in .... P. 347
Overlaying with copper by American aborigines P. 1015
Paleolithic period in District of Columbia ..... P. 777
Paris Exposition, 1889 ... R. 54
Persepolitan casts, two .. R. 80
Pipes and smoking customs of the North American aborigines .. R. 103
Pit-dwellers of Yezo, the ancient ..... R. 49
Plants, aboriginal uses of. B. 39 (J)
Playing cards from Japan ..... R. 99, P. 836
Pointed bark canoes of the Kutenai and Amur. R. 114
Porcelains, Hippisley collection of Chinese ..... R. 118
Potomac tide-water region ..... P. 776
Prehistoric art ..... R. 98
Primitive American armor ..... R. 77
frame for weaving ... R. 112
methods of drilling .... R. 87
travel and transportation ..... R. 83
Religious history and ceremonials, collections illustrating ..... R. 81
Roman mosaic, Carthage. P. 333
Shell-beds ..... P. 351
Shell-mounds ..... P. 229
Shinto, or mythology of the Japanese ..... R. 58
Shofar, the ..... R. 66, P. 936
Stone age at Mt. Vernon. P. 730
Swastika, the ..... R. 88
Throwing-sticks from Mexico and California. P. 932
Throwing-sticks in the National Museum ..... R. 1
Tibet, ethnology of ..... R. 79
Ulu, Eskimo woman's knife ..... R. 48
Weaving, frame for ..... R. 112
West Virginia, early pottery in ..... R. 113
White-line engraving or relief printing in the fifteenth and sixteenth centuries ..... R 46
Wolpai, a maid of ..... P 889
Wooden statue of Baron Ii Kamon-no-Kami-Naosuké ..... R. 8

Antigua, birds ..... P. 35
Antillean region, Tertiary fossils from.... P. 1110
Antilles. Crustacea (n. g. and n. sp.) ... P. 986
Solenidæ of North America and Antilles ..... P. 1185
Antilles, Lesser, birds..... P. 61, P. 478
Antiquities, requesting information for department of ..... C. 36
Antiquity of the red race in America .... R. 96
Antlers, abnormal, of Virginia deer..... P. 358
Apparatus for capture of fish (London Fisheries Exhibition) ..... B. 27
Aquatic mammals, catalogue of (London Fisheries Exhibition) ..... B. 27
Arachnids. Africa, West ..... P. 951
Araneæ, temperate North America, catalogue of..... P. 782
Arizona ..... P. 1223
Harvest spiders of Ohio, catalogue of..... P. 950
Archæology. (See under Anthropology.)
Arctic America, birds and eggs from..... P. 865
contributions to the natural history of ..... B. 15
region. Mollusks ..... P. 48
Siberia. Fossils ..... P. 946
Miocene fauna of..... P. 946
Arizona. Arachnids ..... P. 1223
Birds ..... P. 616, P. 674
Birds' nests and eggs ..... P. 663
Fishes ..... P. 754, P. 1131
Fossil wood..... P. 676
Arkansas. Batrachian..... P. 1023
Fishes ..... P. 549, P. 759
Fossils..... P. 137, P. 207
Geology (meteoric iron) ..... P. 666
Armor, primitive American ..... R. 77
[Armstrong, Frank B.]..... P. 1091
Arrowpoints, spearheads, and knives of prehistoric times ..... R. 108
Artificial deformation of children..... R. 17
Asbestos and asbestiform minerals..... P. 1066
Ashmead, Wm. H..... P. 760, P. 779, P. 1102, P. 1202, P. 1206, B. 45
Ashmead, Wm. H. (coauthor) ..... P. 1092
Asia (Central). Birds..... P. 1195
Assumption Island. Birds . P. 953, P. 1008, P. 1079
Natural history of .. P. 973
Atlanta Cotton Exposition, samples of raw cotton presented by..... P. 333
Atlantic coast Isopods, key to the..... P. 1222
mollusks, revision of the.. P. 1139
Avifauna Columbiana..... B. 26
[Ayres, Dr.] ..... P. 159

B.

Bacteria, experiments on ..... P. 218
Baffin Land. Fossils Lower Silurian.... P. 1192
Bahama Islands. Birds ... . P. 600
Iguanoid lizard from.. P. 1219
Reptiles ..... P. 645, P. 1219
Baird, Spencer F ..... P. 229, C. 2, C. 3, C. 4, C. 9, C. 14, C. 20, C. 35
Baird, Spencer F., the published writings of ..... B. 20
Baltistan. Birds ..... P. 1078
Baltistan. Mammals ..... P. 976
Banks, Nathan ..... P. 1223
Banks, Nathan (coauthor) ..... P. 951
Barbuda. Birds..... P. 35
Basket work of the North American aborigines ..... R. 1
Batrachians. Amblystoma annulatum (n. sp.) ..... P. 1023
copeianum ... P. 512
mexicanum (Axolotl), habits and rearing of .. P. 276
Amphiuma in Virginia.... P. 1150
Arkansas, salamander..... P. 1023
Blind tailed batrachian, Texas ..... P. 1088
Bufo, new species of..... P. 715
Desmognathus brimleyorum (n. sp.) ..... P. 1023
Discoglossoid toad, n. g. and sp. of..... P. 1178
Hyla regilia, variations of. P. 1156
Indiana ..... P. 512
North American..... B. 34
Texas ..... P. 715, P. 1088
Tropical America ..... P. 847
Virginia..... P. 1150
(See also under Reptiles and Batrachians.)
Baur, G ..... P. 1005
Bean, Barton A ..... P. 843, P. 1030, P. 1159, P. 1165
Bean, Barton A. (coauthor)..... P. 1029, P. 1106, P 1112, P. 1127, P. 1167
Bean, Tarleton H..... P. 28 P. 47, P. 49, P. 59, P. 63, P. 69, P. 70, P. 71, P. 80, P. 89, P. 90, P. 95, P. 100, P. 124, P. 127, P. 190, P. 204, P. 210, P. 224, P. 225, P. 233, P. 255, P. 265, P. 271, P. 274, P. 340, P. 342, P. 357, P. 387, P. 388, P. 389, P. 397, P. 407, P. 429, P. 430, P. 486, P. 487, P. 504, P. 505, P. 508, P, 509, P. 516, P. 517, P. 637, P. 657, P. 658, P. 671, P. 672, P. 748, P. 787, P. 795, P. 896, P. 903, P. 967, P. 1027, P. 1028, B. 27
Bean, Tarleton H. (coauthor)... P. 10, P. 13, P. 16, P. 23, P. 24, P. 26, P. 40, P. 41, P. 50, P. 52, P. 53, P. 64, P. 65, P. 66, P. 68, P. 74, P. 77, P. 78, P. 98, P. 211, P. 241, P. 281, P. 297, P. 406, P. 418, P. 510, P. 533, P. 543, P. 1012, P. 1013, P. 1014, P. 1029, P. 1106, P. 1112, P. 1127, P. 1167, Sp. B. 2
Beckham, Charles Wickliffe ..... P. 546, P. 673
Beeson, Charles H. (coauthor) ..... P. 1009
Belding, L.. P. 56, P. 313, P. 314, P. 360, P. 385, P. 386
[Belding, L.] ..... P. 293
Bendire, Charles.. R. 76, P. 196, P. 265, P. 287, P. 662, P. 663, P. 983, B. 39 (D), Sp. B. 1, Sp. B. 3, C. 30
Benedict, James E..... P. 420, P. 594, P. 887, P. 900, P. 949, P. 1016, P. 1087, P. 1216, P. 1236
Benedict, James E. (coauthor)..... P. 858
[Benguiat, Hadji Ephraim]..... R. 115
Bering Island. Fishes..... P. 1106
Mammals, new species of P. 540
Bering Sea. Mollusks..... P. 562, P. 571
Berlepsch, Hans von..... P. 755
Berlin Exhibition, exhibit by U. S. Fish Commission of collection illustrating the fisheries and fish culture of the United States at the ..... B. 18

Bermudas. Annelids ..... B. 25 (VII)
Birds ..... B. 25 (IV)
Botany ..... B. 25 (II)
Contributions to the natural history of the ..... B. 25
Fishes ..... P. 23, P. 58
catalogue of ..... B. 5
Geology ..... B. 25 (I)
Mammals ..... B. 25 (III)
Notes on birds ..... B. 25 (V)
Reptiles ..... B. 25 (VI)
[Bert, Dr. Louis F. H] ..... P. 732
Beyer, H. G ..... P. 498, P. 515, C. 32
Biblical antiquities ..... R. 100
Bibliographical catalogue of deserbed transformations of North American Lepidoptera ..... B. 35
Bibliographies of American naturalists:
I. Spencer F. Baird ..... B. 20
II. Isaac Lea ..... B. 23
III. Fielding B. Meek, Charles A. White, and Charles D. Walcott. B. 30
IV. George Newbold Lawrence ..... B. 40
V. Charles Girard ..... B. 41
Bibliography. Fishes of the Pacific coast of the United States .... B. 11
Goode, G. Brown ... Rep. 1897 (II)
Sclater, Philip Lutley .... B. 49
Bigelow, Robert Payne ..... P. 1017
Binney, W. G ..... B. 28
Biology. (See under Botany and the various zoological groups.)
Biology to geological investigation, relation of ..... R. 64
Birds. Abrolhos Islands, 1887 ..... P. 768
Acanthidops bairdi ..... P. 708
Accipiter cooperi mexicanus ..... P. 691
Accipiter velox, new subspecies of P. 691
Ægialites albidipectus (plover) .. P. 312
Æstrelata defilippiana ..... P. 471
fisheri (n. sp.) ..... P. 339
fisheri ..... P. 471
sandwichensis .... P. 556, P. 693
Africa, West (Cameroons district). P. 1180
Alaska ... P. 274, P. 339, P. 411, P. 412, P. 960
Albino birds ..... P. 733
Aldabra and Assumption islands. P. 953
Aldabra Island ..... P. 1008, P. 1079
Amazilia cerviniventris ..... P. 189
yucatanensis ..... P. 189
Amazon, Lower ..... P. 591, P. 660
new Dendrocolaptine bird from .. P. 618
America, tree-creepers of ..... P. 270
American birds, descriptions of .. P. 60
Amirante Islands ..... P. 1079
Ammodramus caudacutus becki (n. sp.) ..... P. 872
Anas boschas obscura ..... P. 409
Anser leucopareius ..... P. 475
Anseres, North American, osteology of ..... P. 711
Anthus cervinus ..... P. 361
Antigua, catalogue of birds of .... P. 35
Antrostomus rufo-maculatus (n. sp.) ..... P. 867
Birds. Ant-thrush, Phlegopsis saturata (n. sp.) ..... P. 1090
Aquatic and fish-eating birds (London Fisheries Exhibition). B. 27
Arctic America ..... P. 865
Ardea wuerdemanni ..... P. 612
Arizona ..... P. 616
new Psaltriparus from ... P. 674
Assumption Island ..... P. 1008, P. 1079
Atthis ellioti (n. sp.) ..... P. 7
Australia ..... P. 570
Bahamas, new form of Spindalis from the ..... P. 600
Baltistan ..... P. 1078
Barbuda, catalogue of birds of ... P. 35
Basileuterus rufifrons, two new forms of ..... P. 895
Bibliography of British birds .... P. 101
Birds of Paradise and Bower birds P. 875
Birds of Paradise, new species of. P. 1204
Boat-billed heron, new species of. P. 493
British birds, list of faunal publications relating to ..... P. 101
British Guiana ..... P. 538
British marsh-tit ..... P. 560
Bullfinches, northern palæarctic . P. 610
Buteo latissimus (melanistic) .... P. 567
oxypterus (type) ..... P. 488
Cabanis ..... P. 262
California ..... P. 361,
P. 458, P. 623, P. 872, P. 1196
central, list of birds of. P. 56
lower ..... P. 247,
P. 313, P. 314, P. 360, P. 386
Callipepla elegans bensoni (n. sp.) P. 617
Caribbean Sea ..... P. 665
Carpodectes antoniæ ..... P. 605
Cathartes burrovianus ..... P. 480
urubitinga ..... P. 480
Catharus berlepschi (n. sp.) ..... P. 653
berlepschi ..... P. 654
Central America ..... P. 493
Central Asia ..... P. 1083, P. 1195
Central Mexico ..... P. 975
Centurus, review of the genus .... P. 198
Cepphus, remarks on the genus .. P. 425
Certhia of Europe and America .. P. 270
Certhiola, synopsis of species of .. P. 478
Ceryle stictipennis (n. sp.) ..... P. 545
Chile ..... P. 312
Chrysotis, new parrot from Dominica ..... P. 142
Commander Islands ..... P. 345,
P. 614, P. 765, P. 1095, B. 29
Contopus pileatus (n. sp.) ..... P. 474
Coot, new species of ..... P. 446
Costa Rica ..... P. 39, P. 235,
P. 295, P. 305, P. 392, P. 477, P. 499,
P. 599, P. 611, P. 750, P. 855, P. 867,
P. 869, P. 879, P. 888, P. 947, P. 956
Cotinga ridgwayi (n. sp.) ..... P. 599
Cowbirds, the ..... R. 76
Cozumel Island ..... P. 539
Cozumel, new hawk from ..... P. 494
Creepers (Japanese) ..... P. 667
Cyanecula abbotti (n. sp.) ..... P. 1078
Cyclorhis, new subspecies of ..... P. 588

Birds. Cygninæ, outlines of monograph of the..... P. 275
Dendrocincla, review of..... P. 650
Dendrornis striatigularis (n. sp.). P. 1200
Dickcissel from District of Columbia, disappearance of..... P. 806
Directions for collecting ..... B. 39 (A)
District of Columbia, list of birds of the..... B. 26
Dominica, catalogue of birds from P. 19
new parrot from ..... P. 142
Downy woodpecker, new subspecies of ..... P. 1080
Dromococcyx from British Guiana..... P. 538
Dryobates nuttallii..... P. 590
pubescens gairdnerii .. P. 590
new subspecies of..... P. 1080
Duck new to North American fauna..... P. 188
Eastern Turkestan, Thian Shan Mountains, and Tagdumbash Pamir ..... P. 1083
Ecuador, new species of Catharus from ..... P. 653
Empidonaces, nests and eggs of.. P. 62
European birds, generic and specific names of... P. 261
crested titmice ..... P. 695
thrushes..... P. 577
Europe, tree-creepers of..... P. 270
Farallon rail..... P. 828
Field-sparrow, new species of .... P. 432
Florida ..... P. 457
Flycatcher, new species of ..... P. 236
Flycatchers, two apparently new species of ..... P. 888
Formicarius, revision of genus ... P. 961
Galapagos archipelago ..... P. 573, P. 767, P. 1007, P. 1067, P. 1116
Generic names apparently preoccupied..... P. 530
Geothlypis flavovelatus (n. sp) ... P. 1045
poliocephala ralphi (n. sp.)..... P. 964
Gloriosa Island ..... P. 1008, P. 1079
Goatsuckers and owls, pterylography of ..... P. 1018
Golden warblers, review of the... P. 522
"Grampus," birds observed by, 1887..... P. 819
Gray shrike in Japan..... P. 931
Great auk, history and anatomy of the..... R. 26
Grenada, catalogue of birds of P. 45, P. 596
Ground warbler, eastern Mexico. P. 1045
Grouse and quail, on the feather-tracts of ..... P. 1166
Guadeloupe, catalogue of birds of. P. 57
Guatemala ..... P. 7
Hæmatopus galapagensis (n. sp.). P. 573
Hapaloderma vittatum, new genus of Trogons, based on ..... P. 1024
Harporhynchus ..... P. 262
Hawaiian Islands ..... P. 692
Birds. Hawaiian Islands (Kaiu) ... P. 640, P. 778
Hawk, Cozumel, new species from ..... P. 494
Heligoland ..... P. 67
Honduras ..... P. 665, P. 868
Honey creepers, from Lesser Antilles..... P. 478
Humming bird, new species of... P. 7
Humming birds, structure of tongue in. P. 848
the..... R. 45
Hybrid between Dryobates nuttallii and D. pubescens gairdnerii ..... P. 590
ducks, domesticated..... P. 409
Ibises, storks, and herons (Japanese)..... P. 628
Icterus cucullatus ..... P. 472
new species of ..... P. 166
Japan ..... P. 390, P. 558, P. 578, P. 579, P. 598, P. 601, P. 628, P. 641, P. 642, P. 667, P. 735, P. 751, P. 904, P. 931, P. 974, P. 997
(Idzu) ..... P. 649
(Liu Kiu Islands)..... P. 473
water birds of..... P. 598
Japanese avifauna, additions to.. P. 906
birds in Sci. Coll. Tokyo P. 874, P. 957
carrion crow..... P. 629
notes on ..... P. 383
Kamtchatka, three-toed woodpecker from ..... P. 701
Kamtchatkan carrion crow ..... P. 629
Kashmir..... P. 1078
Kauai Island ..... P. 609
Kerguelen Island, ornithology of. B. 2
Kuril Islands..... P. 1144
Labrador ..... P. 518
Ladak ..... P. 1078
Lagopus mutus, and its allies .... P. 279
Lesser Antilles..... P. 478
catalogue of birds of ..... P. 61
Liberia ..... P. 1182
Life histories of North American birds..... Sp. B. 1 and 3
Lower Siam ..... P. 1201
Loxigilla, new subspecies of..... P. 216
Madagascar ..... P. 1118, P. 1197
Magellan Straits, 1887 ..... P. 768
Manitoba ..... P. 841
Margarita Island ..... P. 1093
Marsh tits ..... P. 686
Martinique, catalogue of birds of. P. 51
Megascops, new species of..... P. 626
Melanetta fusca in Alaska..... P. 411
Merula confinis..... P. 362
Methriopterus..... P. 262
Mexico. P. 385, P. 945, P. 962, P. 1045, P. 1091
Collected by Geographical Exploring Commission..... P. 559
Gulf of (n. sp.) ..... P. 652
(Sonora), new plumed partridge from ..... P. 617

Birds. Mexico, Southwestern, catalogue of birds from ..... B. 4
Middle America..... P. 655
American, not in National Museum..... P. 215
Miminæ, new genus of..... P. 262
Mionectes semischistaceus..... P. 888
Motacilla amurensis..... P. 356
blackistoni..... P. 356
ocularis..... P. 356
Muscisaxicola occipitalis (n. sp.). P. 643
Myadestes obscurus, two new races of..... P. 239
synopsis of the..... P. 260
Myiarchus coalei (n. sp.)..... P. 589
Myiarchus, remarks on genus.... P. 955
yucatanensis..... P. 955
Neotropical birds in National Museum..... P. 755
New Mexico, new species of field sparrow from..... P. 432
New species and geographical races..... P. 38
Nicaragua ..... P. 391, P. 947, P. 1090
Nomenclature of North American birds..... B. 21
North America, catalogue of birds of..... P. 138
North American birds—
Desiderata..... P. 219
Emended names of..... P. 524
Fauna, additions to ..... P. 247
Generic and specific names of. P. 261
New races of ..... P. 259
New species of..... P. 285
Revisions of nomenclature of. P. 102
North and Middle America ..... B. 50
Nucifraga caryocatactes macrorhynchus..... P. 735
Oceanodroma townsendi (n. sp.). P. 962
Odontophorus consobrinus (n. sp.) P. 945
Old world birds, catalogue of .... P. 234
Onychotes gruberi..... P. 481
Oology of North American birds, comparative..... R. 69
Orinoco District, new species from the ..... P. 589
Ornithion pusillum subflavum... P. 888
Ornithological explorations in the Commander Islands and Kamtchatka..... B. 29
Owl, new species from Porto Rico P. 238
Oyster-catcher, from Galapagos Islands ..... P. 573
Pachyrhamphus albinucha ..... P. 870
Pacific coast..... P. 799
Pallas' cormorant, history of..... P. 765
Pardalotus (Australian)..... P. 570
Passer saturatus (n. sp.)..... P. 473
Passerine birds, new family of ... P. 1076
Patella, forms of ..... P. 439
Peru (Lake Titicaca)..... P. 643
Petrel, from Alaska, new species of..... P. 339
supposed new species of.. P. 236
Petropaulovski ..... P. 345

Birds. Peucæa mexicana, a sparrow new to the United States ..... P. 496
Peucedramus olivaceus aurantiacus (n. subsp.) ..... P. 1074
Phacellodomus inornatus (n. sp.). P. 619
Philippine and Palawan Islands.. P. 1134
Phrygilus gayi..... P. 644
Picoides albidior (three-toed woodpecker) ..... P. 701
Picolaptes, apparently new species of ..... P. 591
Pigeons (Japanese)..... P. 642
Plover, from Chili, supposed new species of ..... P. 312
Polioptila californica, nests and eggs of..... P. 662
Porto Rico, new owl from..... P. 238
Porzana alfari (n. sp.), Costa Rica. P. 611
Porzana jamaicensis coturniculus. P. 828
Procniatidæ ..... P. 1076
Psaltriparus santaritæ (n. sp.) .... P. 674
Psittacula..... P. 661
Psittirostra psittacea, from Kaui . P. 640
Rails, gallinules, and coots, Japanese ..... P. 579
Rallus gularis, R. jouyi, R. striatus ..... P. 576
Red-shouldered hawk, new race.. P. 457
Regulus calendula, plumage of... P. 546
St. Vincent, catalogue of birds of. P. 27
Sandwich Islands..... P. 236
Santa Barbara Islands ..... P. 1196
Santa Lucia, 1887 ..... P. 768
Sclerurus, review of ..... P. 762
Scops, review of the genus..... P. 21
Selasphorus torridus..... P. 400
Seychelles Islands..... P. 1079
Siberia ..... P. 274
Sittasomus, note on..... P. 877
Snow bunting, from Alaska, new species of ..... P. 412
South American, not in National Museum ..... P. 215
Sparrow new to the United States. P. 496
Sparrows ..... P. 458
Spindalis zena townsendi (n. sp.). P. 600
Spiza americana..... P. 806
Spotted tinamou, osteology of.... P. 622
Storm petrel, Mexico ..... P. 962
Swifts, supposed new species of... P. 923
Synthliboramphus wumizusume . P. 592
Tantalus, and its allies ..... P. 315
Texas..... P. 673, P. 964
southern, ornithology of ... P. 22
Thamnophilus, supposed new forms of ..... P. 871
Three-toed woodpecker ..... P. 701
Thrushes, new species of ..... P. 240
Thryomanes, revision of..... P. 1153
Tits and nuthatches, Japanese... P. 578
Tongues of ..... R. 93
Tree-creepers..... P. 270
Tree-sparrow, new species of ..... P. 473
Trinominals, use of..... P. 413
Trochilidæ, catalogue of..... P. 155
Trogon ambignus ..... P. 616

Birds. Trogon chrysomelas (n. sp.) ..... P. 947
new genus of ..... P. 1024
Turdidæ, American, systematic arrangement of ..... P. 301
Turdidæ, new species of ..... P. 103
Turdus alpestris ..... P. 577
Japan ..... P. 601
torquatus ..... P. 577
Tyrannus ..... P. 60
Uropsila, on the name ..... P. 656
Venezuela ..... P. 555, P. 619, P. 1093
Warbler, new species from Santa Lucia ..... P. 311, P. 476
Weapons and wings of ..... R. 78
West-coast ..... P. 85
West Indies ..... P. 216, P. 260, P. 420, P. 446, P. 545
new species from Dominica ..... P. 103
new species of Icterus from ..... P. 166
new species of warbler from Santa Lucia ..... P. 311
on a collection of birds from ..... P. 420
Wheatears (Saxicola) North America ..... P. 1220
Woodpecker, three-toed ..... P. 701
Woodpeckers, Japanese ..... P. 558
Wrens (Japan) ..... P. 751
Thryomanes revision of ..... P. 1153
Xiphocolaptes, notes on ..... P. 796
review of ..... P. 761
Yucatan ..... P. 476
new subspecies of Cyclorhis from ..... P. 588
(See also under Anatomy.)
Birds and eggs, exchanges of ..... C. 34
Birds' eggs. Arctic America ..... P. 865
List of deficiencies, and instructions for collecting ..... C. 30
Questions relating to ..... C. 50
Birds' eggs and nests, directions for collecting, preparing, and preserving ..... B. 39 (D)
Birds' nests and eggs. Aldabra Island ..... P. 983
Arizona ..... P. 663
Black-capped gnat-catcher ..... P. 662
California ..... P. 662
Birds' skeletons. Abrolhos Islands ..... P. 798
Brazil ..... P. 798
Galapagos Islands ..... P. 798
Magellan Straits ..... P. 798
Bison, American, extermination of the ..... R. 21
fossil, North America ..... P. 1172
Black Hills, fossil tree trunks from ..... P. 1141
Blakiston, T. W. ..... P. 598
Blatchley, W. S. ..... P. 922
Boas, Franz ..... R. 89, P. 709
Boehmer, George H ..... R. 61, P. 583
Bogosloff Island, hornblende andesites ..... P. 479
Bolles, T. Dix ..... R. 20, P. 899
Bollman, Charles H ..... P. 585, P. 625, P. 670, P. 714, P. 720, P. 721, P. 722, P. 731, B. 46
(coauthor) ..... P. 752, P. 770
Boomerang, study of the ..... P. 724
Boreal America, insects (Noctuidæ) ..... P. 890, P. 891, P. 892
Botany. Alaska, 1888 ..... P. 772
list of lichens from ..... P. 397
plants from Nushagak ..... P. 513
Algæ, freshwater, notes on collecting and preserving ..... B. 39 (B)
Alopecurus stejnegeri (n. sp.) ..... P. 620
Antennaria, revision of species of ..... P. 1230
Anthoxanthum odoratum, the flowers of ..... P. 910
California, Lower ..... P. 725, P. 749
Clarion Island, 1889 ..... P. 801
Commander Islands ..... P. 462, P. 463, P. 620
Diatomaceæ ..... P. 937
Directions for collecting recent and fossil plants ..... B. 39 (B)
Directions for collecting specimens and information illustrating the aboriginal uses of plants ..... B. 39 (J)
Ferns and fern allies, North America ..... P. 1226
Flora of St. Croix and the Virgin Islands ..... B. 13
Flora of Washington and vicinity ..... B. 22
Flora of Washington and vicinity, proposed revision of ..... C. 46
Food plants of Coccidæ ..... P. 1122
Illinois ..... P. 264
Indiana ..... P. 264, P. 1010
Japanese woods presented by University of Tokyo ..... P. 232
Jumping seeds and galls ..... P. 330
Socorro Island, 1889 ..... P. 801
Texas, flora of western and southern ..... P. 535
Trees of Lower Wabash and White River valleys ..... P. 264
Trees of Lower Wabash valley ..... P. 1010
Violaceæ, North American, distribution of ..... C. 49
Bothriothoracine insects of the United States ..... P. 1025
Bourns, Frank S. (coauthor) ..... P. 1134
Boyd, C. H. ..... P. 223
[Bradley, Prof. Frank H.] ..... P. 329
[Bransford, Dr. J. F] ..... P. 11
Brayton, Alembert W. (coauthor) ..... B. 12
Brazil. Bird skeletons ..... P. 798
Fishes ..... P. 829
Brewer, T. M ..... P. 62
British America. Moose, habits of the ..... P. 827
British Columbia. Fishes ..... P. 255, P. 387, P. 682, P. 787, P. 938
British Guiana. Birds ..... P. 538
Brock, R. A. ..... P. 489
Bronze Buddha in the National Museum. R. 43
Brown, James Temple ..... B. 27
Bruner, Lawrence ..... P. 764
Building and ornamental stones, collection of ..... R. 12
Building and ornamental stones, plan for collection of, New Orleans Exposition, 1884-85 ..... C. 25

Building-stone collection C.9
Burial mounds of Japan R.59
Burma. Jadeite, analysis of P.981
Burns, Frank R.67
Busck, August P.1208
Bush, Katherine J P.377
Bush, Katherine J. (coauthor) P.1139

C.

California. Anthropological studies in.. R.116
Anthropology P.932
Birds P.56, P.158, P.623, P.872, P.1196
Birds' nests and eggs..... P.662
Fishes..... P.72, P.97, P.106, P.107, P.108, P.109, P.110, P.111, P.117, P.118, P.120, P.122, P.123, P.125, P.126, P.129, P.130, P.132, P.133, P.135, P.136, P.140, P.141, P.146, P.150, P.151, P.152, P.153, P.154, P.156, P.157, P.158, P.161, P.162, P.164, P.176, P.182, P.187, P.193, P.208, P.269, P.288, P.296, P.373, P.742, P.774, P.897, P.916, P.917, P.967, P.1161
Fossil corals..... P.1194
plants P.679
Fossils P.2, P.14, P.113, P.1145, P.1194
Mammals P.492, P.623
Mollusks P.18, P.536, P.584, P.898, P.1191
Reptiles P.623, P.689, P.766, P.878, P.944, P.977, P.1020, P.1044
Throwing-sticks from P.932
Xantusia henshawi (n. sp.) . P.944
California, Gulf of. Fishes... P.227, P.698, P.880
Reptiles..... P.800
Lower. Birds P.247, P.313, P.314, P.360, P.361, P.386
Botany..... P.725, P.749
Bulimulus P.958
Contributions to natural history of B.7
Fishes..... P.149, P.227, P.289, P.290, P.293, P.376, P.563
from San Cristobal..... P.469
Geology..... R.91
Mollusks P.958
from Todos Santos Bay P.536
Natural history of .. R.91
Reptiles..... P.788
Call, R. Ellsworth P.651
Calvert, Philip P P.1046, P.1047
Calvert, Philip P. (coauthor)..... P.951
Cambrian brachiopods..... P.1120, P.1152, P.1229
Canada. Fossil unios from Toronto drift. P.952
Lynx, cranial characters of the. P.603
Mammals P.213
Canoes, pointed bark, of the Kutenai and Amur R.114
Cape Bathurst, Eskimo strike-a-light from..... P.705
Carbonnier, M..... P.276
Caribbean Sea. Birds P.665
Echini P.491
Medusæ P.528
Stalked crinoids..... P.547
Carlin, William E..... P.199
[Carpenter, Lieut. W. L.]..... P.754
Casanowicz, I. M. (coauthor) R.100, R.115
Cases, exhibition R.70
Casting, metallic, of delicate natural objects P.212
Casts, plaster, method of making and preserving P.226
Catesby's "Natural history of Carolina, Florida, and the Bahama Islands," identification of figures of fishes in..... P.422
Catlin collection of Indian paintings .. R.8, R.52
Catskill Mountains. Fauna and flora of the..... P.1147
Mammals..... P.1147
Cattie, S. Th P.148
Central America. Birds P.493, P.975
Fishes P.252, P.925
Mammals..... P.734, P.963
Reptiles and batrachians of..... B.32
Central Asia. Birds P.1083
Ceramic art in China, sketch of R.118
Ceylon. Insects, hymenopterous (parasitic) P.1092
Chaelacayo trephined skull P.531
Chanler expedition, Odonata collected by. P.1047
[Chanler, Wm. Astor] P.970, P.1042, P.1063, P.1098
[Chatelain, Heli] P.968
Cherrie, George K P.855, P.879, P.888
Chesapeake Bay. Fishes..... P.211, P.389
Chess and playing cards R.99
Chile. Birds P.312
China. Ceramic art in..... R.118
Ethnology R.74
Fishes from the Pei-Ho River ... P.1221
Chinese games with dice and dominoes.. R.74
porcelains, catalogue of the Hippisley collection of..... R.25
relics in Alaska P.899
Chittenden, F. H..... P.1041
Cinchona barks in National Museum..... P.582
Cincinnati Exposition, exhibit of gems and precious stones..... C.26
exhibit of graphic arts..... C.37
exhibit of mammals..... C.41
exhibit of oriental antiquities..... C 39
exhibit of prehistoric anthropology.... C.40

Cincinnati Exposition, exhibit of transportation ..... C. 38
report on the participation of the Smithsonian Institution and National Museum in the..... R. 33
Clarion Island. Botany..... P. 801
Reptiles..... P. 800, P. 1231
Clark, A. Howard..... B. 27
Clark, Hubert Lyman..... P. 1018, P. 1166
Clarke, F. W..... R. 10, C. 26
(coauthor) ..... P. 696
Classification for World's Columbian Exposition, draft of system of..... R. 62
Coast Indians of southern Alaska and northern British Columbia..... R. 24
Cockerell, T. D. A ..... P. 1026, P. 1122, P. 1238, B. 39 (L)
Cœlenterates. Actiniæ collected by "Albatross," 1887–88..... P. 930
Cnidaria: Sea nettles, urticating organs of..... P. 1097
Corals, Madrepora, catalogue of the.... P. 604
Porites, catalogue of ..... P. 635
Synaræa, catalogue of..... P. 635
turbinolid, Japan. P. 1194
Medusæ, Caribbean Sea and Gulf of Mexico .... P. 528
Medusæ, stalked. Haliclystus stejnegeri ..... P. 1188
Polyps, Japanese..... P. 346
Radicipes pleurocristatus ..... P. 346
Collins, Frank S..... B. 39 (B)
Collins, G. N. (coauthor)..... P. 837
Collins, Joseph W ..... B. 27
Colombia. Fishes ..... P. 770
Colorado. Fishes ..... P. 780
Fossils..... P. 137, P. 207
Columbia River. Fishes..... P. 196
Commander Islands. Birds ..... P. 345, P. 614, P. 765, P. 1095, B. 29
Botany. P. 462, P. 463, P. 620
Entomostraca..... P. 621
Mollusks..... P. 412
Ornithological explorations in.... B. 29
Commander Islands, natural history of:
(1) General natural history, with descriptions of new cetaceans..... P. 344
(2) Steller's sea-cow ..... P. 421
(3) Mollusks..... P. 412
(4 A) Plants ..... P. 462
(4 B) Plants ..... P. 463
(5) Mesoplodon..... P. 540
(6) Mollusks ..... P. 562
(7) Birds..... P. 614
(8) Plants ..... P. 620
(9) Crustaceans..... P. 621
Commander Islands, natural history of—Continued.
(10) Pallas' cormorant..... P. 765
(11) Pallas' cormorant..... P. 1095
(12) Fishes..... P. 1106
(13) Medusæ..... P. 1188
Congo Free State. Blind snake..... P. 969
Congo. Myriapods..... P. 1036
Contributions to the Museum, acknowledgment of ..... C. 17
Cook, Caleb ..... P. 9
Cook, O. F..... P. 968, P. 1036, P. 1037, P. 1038, P. 1039, P. 1042, P. 1137, P. 1154, P. 1168, P. 1169, P. 1170
Cook, O. F. (coauthor) ..... P. 837
Cooke, George H ..... R. 105
Cooper, J. G ..... P. 85
Cope, E. D..... R. 110, P. 615, P. 645, P. 689, P. 715, P. 727, P. 728, P. 729, P. 769, P. 866, P. 882, B. 1, B. 17, B. 32, B. 34
Copepods. Lerneanthropus (parasitic).. P. 664
Pandarus and Chondracanthus ..... P. 572
Perissopus (parasitic)..... P. 664
Trebius (parasitic)..... P. 664
Copper bowlder, Ontonagon..... R. 94
Copper Island. Fishes ..... P. 1106
Copper, overlaying with, by American aborigines ..... P. 1015
Coquillett, D. W..... P. 1073, P. 1146, P. 1198, P. 1225, P. 1227
Coral, turbinolid, Japan..... P. 1194
Corals, Madrepora, catalogue of..... P. 604
Correspondents of National Museum, circulars addressed to..... C. 43, C. 44, C. 45
Costa Rica. Birds..... P. 39, P. 235, P. 305, P. 392, P. 477, P. 499, P. 599, P. 611, P. 750, P. 855, P. 867, P. 869, P. 879, P. 888, P. 947, P. 956
Gulf of Nicoya..... P. 295
Crustaceans..... P. 1071
Insects ..... P. 1040
Mollusks..... P. 11
Cotton, samples of, presented by Atlanta Cotton Exposition..... P. 333
Coues, Elliott ..... P. 101
Coues, Elliott (coauthor) ..... B. 26
[Coues, Elliott] (editor)..... B. 2
Coville, F. V ..... B. 39 (J)
Cowbird, the..... R. 76
Cox, Wm. V..... R. 23
Cozumel Island. Birds ..... P. 494, P. 539
Cradles of American aborigines..... R. 16
Cramer, Frank (coauthor)..... P. 1114
Crinoids, stalked, Gulf of Mexico and Caribbean Sea..... P. 547
Crocodilians, lizards, and snakes of North America ..... R. 110
Crump burial cave, the..... R. 67
Crustaceans. Africa, west coast of..... P. 949
African fresh-water crabs . P. 980
Alaska, new species from.. P. 459
American fresh-water crabs ..... P. 959
Amphipods, Rhode Island. P. 1084

Crustaceans. Anomurans, U. S. Fish Commission, dredged by ..... P. 343
Antillean region ..... P. 986
Astacidæ, list of ..... P. 525
notes on ..... P. 785
observations on. P. 1136
Brachyurans collected by str. "Albatross," 1887-88. P. 1162
Brachyurans, U. S. Fish Commission, dredged by. P. 343
Callinectes ..... P. 1070
Cambarus pellucidus testii. P. 935
Cambarus pilosus and C. clypeatus described..... P. 1187
Chelura terebrans ..... P. 83
Copepods (parasitic)..... P. 454, P. 572, P. 664
Corystoid crabs (Telmessus and Erimacrus) ..... P. 900
Costa Rica..... P. 1071
Crabs from west coast of North America and Sandwich Islands ..... P. 933
Crabs from West Indies ... P. 1104
Crayfishes, blind, of Indiana ..... P. 935
Decapods, Africa (West) .. P. 1199
dredged by U. S. Fish Commission ..... P. 455
Entomostraca of Commander Islands..... P. 621
Erimacrus..... P. 900
Eryontidæ, new species ... P. 99
Eupagurus, description of 37 new species of ..... P. 887
Fresh-water crabs from Costa Rica..... P. 1071
Hermitcrabs, Pagurus bernhardus type P. 1216
West India region..... P. 1236
Homarus and Nephrops, new species allied to .... P. 506
Idotea japonica described. P. 1189
Inachidæ..... P. 984
Indian Ocean ..... P. 979
Indiana, blind crayfishes of P. 935
Isopods, Atlantic coast .... P. 1222
Japan ..... P. 1189
New England .... P. 75
Pacific coast..... P. 1175
subterranean, new species of..... P. 1176
Labrador ..... P. 375
dredged in 1882.. P. 374
Lithodidæ, descriptions of new genera and species. P. 1016
London Fisheries Exhibition ..... B. 27 (B)
Maiidæ, catalogue of ..... P. 927
New England, 1890 ..... P. 172
New Mexico..... P. 1128
Pagurus bernhardus ..... P. 1216
Panopeus..... P. 858
Penæidæ, catalogue of the. P. 901
Crustaceans. Penæidæ, on some genera of P. 507
Phronimidæ collected by the North Pacific Exploring Expedition ..... P. 258
Point Barrow Expedition.. P. 459
Polycheles sculptus (n. sp.) P. 99
Pseudothelphusinæ ..... P. 1158
San Marcos, from artesian well at..... P. 1087
Siphonostoma, list of ..... P. 454
Sphæroma thermophilum (n. sp.) ..... P. 1128
Stomatopods, report on.... P. 1017
Telmessus ..... P. 900
Texas..... P. 1087
Voices of Crustaceans ..... P. 6
West India region..... P. 1236
Willemœsia group (Eryontidæ) ..... P. 99
Worms, sponges, etc., London Fisheries Exhibition. B. 27
Cuba. Fishes ..... P. 414, P. 516
Havana ..... P. 551
Mollusks ..... P. 790
Myriapods ..... P. 720
Culin, Stewart..... R. 74, R. 84, R. 99
Currie, Rolla P..... P. 1204
[Currie, Rolla P.]..... P. 1182
[Curtiss, A. H.]..... P. 105

D.

Dakota. Fossil Dinosaur..... P. 1224
Fossils (lower cretaceous)..... P. 1224
Dall, William H..... P. 1, P. 2, P. 8, P. 11, P. 14, P. 18, P. 48, P. 228, P. 246, P. 331, P. 384, P. 442, P. 460, P. 519, P. 521, P. 561, P. 562, P. 571, P. 710, P. 773, P. 790, P. 849, P. 946, P. 958, P. 988, P. 1032, P. 1033, P. 1034, P. 1035, P. 1111, P. 1177, P. 1185, P. 1210, P. 1214, P. 1237, B. 8, B. 37, B. 39 (G)
Dall, William H. (coauthor) ..... P. 536, P. 1110
De Kay, Charles..... R. 43
Delaware Bay, Diatomaceæ from ..... P. 937
Delphinidæ, review of the family..... B. 36
Department of Agriculture, shells received from ..... P. 971
Development of the American rail and track ..... R. 41
Dewey, Frederic P..... P. 687, B. 42, C. 31
Diatomaceæ dredged by U. S. Fish Commission off Delaware Bay..... P. 937
Dinosaur, lower cretaceous, South Dakota ..... P. 1224
Directions for anatomical preparations, preservation of..... P. 12
collecting and preparing fossils..... B. 39 (K)
collecting and preserving fish ..... P. 224
collecting and preserving fresh-water algæ..... B. 39 (B)
collecting and preserving insects ..... B. 39 (F)
collecting and preserving scale insects (Coccidæ). B. 39 (L)

Directions for collecting and rearing dragon flies, stone flies, and May flies ..... B.39 (O)
collecting birds ..... B.39 (A)
minerals ..... B.39 (H)
collecting, preparing, and preserving birds' eggs and nests ..... B.39 (D)
collecting, preserving, and transporting tortricids and other small moths .. C.27
collecting recent and fossil plants ..... B.39 (B)
collecting reptiles and batrachians ..... B.39 (E)
collecting rocks and for preparation of thin sections ..... B.39 (I)
collecting specimens and information illustrating the aboriginal uses of plants ..... B.39 (J)
mound exploration C.28
preparing rough skeletons. C.33
study specimens of small mammals ..... B.39 (N)
preserving remains of mastodon and mammoth C.48
removing and preserving mammal skins C.22
taking paper molds, etc ... C.23
Directions. Instructions for collecting mollusks ..... B.39 (G)
Preparation of rough skeletons ..... B.39 (C)
Preservation of marine animals ..... B.39 (M)
Preservation of museum specimens R.22
(See also under "Preparation," Preservation, and Taxidermy.)
District of Columbia. Birds P.806, B.26
Crystalline schists P.363
Geology P.363, P.410, P.523
Paleolithic period P.777
Stone implements P.810
Doering, George E P.582
Dominica. Birds P.19, P.103, P.142
Donaldson, Thomas R.8
[Dow, John M.] P.292
[Drake, Noah Fields] P.1221
Dresel, H. G., U. S. N P.431, P.464
Dresel, H. G., U. S. N. (coauthor) P.418
Drugs and medicines, classification of forms of C.7
Dugès, A P.278, P.678
[Dugès, Prof. A.] P.94, P.95, P.637, P.903
Dyar, Harrison G P.1209
Dyar, Harrison G. (coauthor) P.1140

E.

Eakle, Arthur S P.1148
Earll, R. Edward R.9, B.27
Early West Virginia pottery R.113
Easter Island R.37, R.105
Echini, Caribbean Sea P.491
collected by U. S. Fish Commission P.491
in National Museum, catalogue of (1886) P.569
Mexico, Gulf of P.491, P.544
Echinoderms, Crinoids, stalked, from Gulf of Mexico and Caribbean Sea P.547
Labrador, dredged, 1882 ... P.377
London Fisheries Exhibition ..... B.27 (B)
northeastern coast P.76, P.168, P.534
Starfishes (Heliaster) P.646
Starfishes and ophiurans, description of P.1000
Ecuador. Birds P.653
Edwards, Charles L. (coauthor) P.566
[Edwards, Charles L.] P.752
Edwards, Henry B.35
Edwards, Vinal N P.12
Eggers, H P.724
Eggers, H. F. A B.13
Egleston, T B.33
Eichhoff, William P.1085
Eigenmann, Carl H P.613, P.917, P.897, P.925
Eigenmann, Carl H. (coauthor) P.484, P.587, P.608, P.627, P.742, P.842, P.1009
Eigenmann, Rosa S.[1] (coauthor) P.742, P.842
Embryology. Fin-rays of fishes, development of P.553
Salmon, development of .. P.502
Viviparous osseous fishes, development of P.501
[Emeric, H. F.] P.433
Encyrtinæ with branched antennæ P.905
Endlich, Fred. M P.163, P.201
Eskimo bows, study of R.1
collection, preliminary catalogue R.20
ethnology of the R.90
graphic art of the R.90
harpoon, Greenland P.702
strike-a-light P.705
woman's knife (Ulu) R.48
Establishment and officers of National Museum, 1882 ..... C.5
Ethnology. (See under Anthropology.)
Europe. Birds P.270, P.686, P.695
Evermann, Barton W. (coauthor) P.586, P.681, P.698, P.780, P.791, P.816, P.1043, B.47
Expositions. Berlin Exhibition, 1880, exhibit of fisheries and fish culture ... B.18
Chicago, 1893, participation of National Museum in World's Columbian Exposition R.72
Cincinnati Industrial Exposition, 1884 ..... R.9
Cincinnati, 1888, report on the participation of the Smithsonian Institution and National Museum R.33

[1] See also under Rosa Smith.

Expositions—Continued.
Cincinnati, 1888, collection illustrating the families of mammals ..... C. 41
exhibit of department of prehistoric anthropology ..... C. 40
exhibit of department of transportation and engineering ..... C. 38
exhibit of section of graphic arts ..... C. 37
exhibit of section of oriental antiquities C. 39
London Fisheries Exhibition, 1883, catalogue of collections ..... B. 27
Louisville, Southern Exposition, 1884. R. 9
Madrid, 1892, report on Columbian Historical Exposition ..... R. 71
Marietta, 1888, report on the participation of the Smithsonian Institution and National Museum..... R. 33
Minneapolis, 1887, report on the participation of the Smithsonian Institution and National Museum..... R. 23
New Orleans, 1884, collection illustrating textile industries of United States ..... C. 24
collection of building and ornamental stones and rocks of United States.... C. 25
collection of gems and precious stones ..... C. 26
collection of mammals..... C. 29
report on Smithsonian exhibit .. R. 9
sketch of Smithsonian Institution exhibit ..... R. 7
Paris, 1889, anthropology ..... R. 54
Philadelphia Centennial Exposition, 1876, catalogue of collection illustrating animal resources and fisheries of the United States..... B. 14
World's Columbian Exposition, system of classification ..... R. 62
Extermination, animals recently extinct or threatened with ..... R. 40
Extinct animals ..... R. 40

F.

Fanning Islands, natural history of Hawaiian and ..... B. 7
Farlow, W. G..... P. 222
Farrington, Oliver C..... P. 981
Faxon, Walter ..... P. 525, P. 785, P. 1136
Fernald, C. H ..... C. 27
Ferrari-Pérez, Fernando..... P. 559
Fewkes, J. Walter..... P. 528
Finches, North and Middle America..... B. 50 (1)
Fire-making apparatus..... R. 27
methods of ..... R. 47
Fish-cultural exhibit of U. S. Fish Commission (London Fisheries Exhibition). B. 27
Fisher, A. K ..... P. 811
Fisher, William J..... P. 364
Fisheries and fish-culture of the United States, exhibit at Berlin..... B. 18
Fishery products, preparation, etc. (London Fisheries Exhibition..... B. 27
Fishes. Abeona aurora (n. sp.) ..... P. 151
Acanthopterygian fishes, a genus of..... P. 1059
Acrotus willoughbyi (n. g. and n. sp.) ..... P. 672
Ælurichthys eydouxii ..... P. 405
Aëtobatidæ, nomenclature of ... P. 990
Agonidæ ..... P. 122
Agonus vulsus (n. sp.) ..... P. 162
Agosia, on the genus..... P. 822
Alabama, Escambia River, fishes from..... P. 585
Alaska..... P. 47, P. 59, P. 70, P. 80, P. 255, P. 387, P. 487, P. 748, P. 753, P. 1027, P. 1167
Bibliography of fishes of. P. 233
Description of fishes from. P. 100
New fish from..... P. 121, P. 210, P. 795
Whitefish from..... P. 407
Alaskan and adjacent waters, catalogue of fishes from..... P. 225
Alepidosaurus æsculapius, n. sp. P. 342
Alepocephalus bairdii..... P. 68
Algansea ..... P. 822
Alleghany region of South Carolina, Georgia, and Tennessee, distribution of the fishes of the. B. 12
Amitra, replaced..... P. 350
Amiurus ponderosus, n. sp ..... P. 90
Anarrhichas lepturus ..... P. 80
Antennariidæ, note on the..... P. 31
Anthias vivanus, n. sp ..... P. 465
Apharcus furcatus ..... P. 1232
Aphododeridæ ..... B. 10
Apodal fishes from tropical Pacific or eels of Japan ... P. 856 P. 1239
Apodichthys, n. sp..... P. 130
Apogon pandionis, n. sp ..... P. 211
Apparatus for capture of fishes (London Fisheries Exhibition) B. 27
Aprion ariommus, n. sp..... P. 355
Archosargus, review of ..... P. 608
Argentina syrtensium (n. sp.) ... P. 41
Ariopsis milberti ..... P. 46
Arizona ..... P. 754
Arizona Basin, Colorado ..... P. 1131
Arkansas..... P. 549, P. 759
Artedius fenestralis, n. sp ..... P. 326
Ascelichthys rhodorus, n. sp.... P. 144
Aspidophoroides güntherii (n. sp.) ..... P. 487
Aspredinidæ, note on the..... P. 831
Astroscopus ..... P. 69
Auxis rochei on New England coast ..... P. 183

Fishes. Bathymaster jordani (n. sp.).... P. 753
Bdellostoma or Heptatrema, proper name of ..... P. 1234
Bdellostomidæ ..... P. 309
Belone exilis, generic relations of P. 174
latimanus ..... P. 5
Belonidæ, review of the ..... P. 575
Benthodesmus, n. g..... P. 241
Bering Island ..... P. 1106
Bermudas ..... P. 23, P. 58
catalogue of fishes ... B. 5
Bibliography (partial) of fishes of Pacific coast and Alaska, 1880..... P. 233
Bleekeria gilli (n. sp.)..... P. 1028
Blennoid fish, California..... P. 967
Blenny, new species from Santa Barbara ..... P. 288
Blue-fish, on the proper name of. P. 322
Bothus, synonymy of the genus. P. 325
Brachyopsis verrucosus, n. sp ... P. 122
xyosternus, n. sp .. P. 135
Brazil, list of fishes from Bahia.. P. 829
Brevoortia patronus ..... P. 25
Brevoortia, revision of ..... P. 15
British Columbia..... P. 255, P. 387, P. 682, P. 787, P. 938
British Museum, American fishes in ..... P. 81
Brosmius americanus ..... P. 53
brosme..... P. 53
Calamus proridens, n. sp..... P. 417
review of species of.... P. 401
California ..... P. 72, P. 106, P. 107, P. 108, P. 109, P. 110, P. 111, P. 120, P. 126, P. 129, P. 288, P. 373, P. 742, P. 774, P. 897, P, 917, P. 967, P. 1161
chiroid fish, new, from Monterey Bay P. 140
Kern River..... P. 916
new agonoid fish.... P. 135
P. 162
new deep-water fish. P. 154
new embiotocoid fish P. 153, P. 156, P. 157
new flat-fish ..... P. 158
new flounder ..... P. 117, P. 136, P. 152
new genera and species ..... P. 97
new genus and species ..... P. 123
new gobioid fish..... P. 187
new Hemirhamphus. P. 164
new rockfish ..... P. 176
new Scopeloid fishes. P. 146
new Scorpænoid fish. P. 157, P. 161
new Sebastoid fishes. P. 150
new shark ..... P. 269
new species.... P. 125, P. 126, P. 129, P. 130, P. 132, P. 296
new species of Agonidæ..... P. 122
new species of Cremnobates..... P. 133
Fishes. California, new species of Gobiesox ..... P. 208
new species of Prionotus ..... P. 182
new species of Ptychochilus..... P. 193
new species of ray.. P. 141
sharks from coast of. P. 118
California, Gulf of..... P. 880
new species.. P. 227, P. 698
California, Lower ... P. 293, P. 376, P. 469
Conodon serrifer ..... P. 289
new sparoid fish ..... P. 149
new species.. P. 227, P. 290
new species of Rhinoptera P. 563
Callionymus bairdi (n. sp.)..... P. 652
Candle-fish of Northwest coast.. P. 143
Cape Charles City, Va..... P. 843
Carangidæ ..... P. 304
Caranginæ, review of the ..... P. 367
Caranx bartholomæi ..... P. 403
Caranx beani, n. sp..... P. 178
Caranx ruber ..... P. 403
Carcharias lamiella, n. sp ..... P. 269
Cardinal fishes of Japan ..... P. 1240
Catalogue of fishes sent to London Fisheries Exhibition ..... B. 27
Catesby's Natural History of Carolina, Florida, and the Bahama Islands ..... P. 422
Cathetostoma albigutta (n. sp.).. P. 896
Catostomidæ, identification of .. P. 500
synopsis of..... B. 12
Caulolatilus microps ..... P. 16, P. 517
Caulolepis longidens..... P. 1161
Central America ..... P. 925
Xenichthys (n. sp.) ..... P. 252
Centrarchidæ ..... P. 197, B. 10
Centropomidæ ..... P. 302
Cephaleutherus of Rafinesque .. P. 1054
Cephaloscyllium laticeps on coast of California ..... P. 110
Ceratiidæ ..... P. 33
Cetomimidæ, bathybial fishes... P. 1012
Chætodon aya (n. sp.)..... P. 565
Char, supposed new species of .. P. 671
Characinoid and erythrinoid fishes, differential characters of P. 1056
Characinoid fishes with ctenoid scales..... P. 1055
Characinus, notes on..... P. 1058
Check-list of duplicates distributed ..... P. 127, P. 185
Chesapeake Bay..... P. 389
Apogon (n. sp.) P. 211
Chilomycterus ..... P. 917
Chimæroid fish, new type of .... P. 1014
China ..... P. 1221
Chirus, remarks on species of.... P. 120
Chloroscombrus orqueta, n. sp.. P. 334
Chonerhinus, note on ..... P. 884

Fishes. Chriodorus, n. g. ... P. 297
Citharichthys macrops, n. sp ... P. 464
stigmæus, n. sp .. P. 296
Clupea tyrannus ... P. 4
Collecting and preserving ... P. 224
Colombia, 1887–88 ... P. 770
Colorado ... P. 780, P. 1131
Columbia River, Salmonidæ of .. P. 196
Conodon serrifer, n. sp ... P. 289
Copper Island ... P. 1106
Coregonus hoyi (smelt) ... P. 340
nelsonii, n. sp ... P. 407
pusillus (n. sp.) ... P. 748
Coryphæna hippurus ... P. 517, P. 548
Cottidæ, Etheostomatidæ, Percidæ, Centrarchidæ, Aphododeridæ, Dorysomatidæ, and Cyprinidæ, notes on ... B. 10
Cottidæ, new genus and species of P. 209
Cottus bubalis ... P. 505
maculatus ... P. 505
Couesius greeni (n. sp.) ... P. 938
Crab-eater, Hudson Valley ... P. 811
Craig flounder ... P. 10
Cremnobates integripinnis, n. sp. P. 133
Cremnobates integripinnis, life colors of ... P. 372
Crossorhinus ... P. 1057
Cuba ... P. 516, P. 551
scaroid fishes ... P. 414
Cuvier and Valenciennes, fishes described by ... P. 594
Cybium ... P. 3
Cyclopsetta chittendeni (n. sp.). P. 1030
Cyclopteroidea, the relations of. P. 834
Cymatogaster rosaceus n. sp ... P. 153
Cyprinidæ, identification of ... P. 500
new species of ... P. 450
on the genera of ... B. 10
Cyprinodontidæ, nomenclature of ... P. 159, P. 991
Dacentrus, note on ... P. 160
Deep-sea and pelagic fishes ... Sp. B. 2
Delolepis (n. g. and n. sp.) ... P. 255
Destruction of ... P. 200, P. 203
Dinolestes lewini ... P. 1186
Diplodus, review of ... P. 608
Dipterodon ... P. 684
Directions for collecting and preserving ... P. 224
Ditrema atripes (n. sp.) ... P. 156
Dorysoma cepedianum heterurum ... P. 43
Dorysomatidæ ... B. 10
Echeneidids ... P. 320
Eels, diagnoses of new genera .. P. 381
genitalia of ... P. 148
Elacate canada (crab-eater) ... P. 811
Elacatids ... P. 668
Eleginus of Fisher ... P. 853
Ephippiids ... P. 318
Epinephelus and related genera, American species of ... P. 447
drummond-hayi ... P. 23
nigritus. P. 26, P. 511, P. 517

Fishes. Etheostoma micropterus (n. sp.). P. 823
tippecanoe (n. sp.) .. P. 791
variatum ... P. 503
Etheostomatidæ ... B. 10
Etheostomoids, descriptions of .. P. 607
Euchalarodus putnami ... P. 49
Eulachon of northwest coast ... P. 143
European fishes in National Museum, list of ... P. 63
Eurypharyngidæ, anatomy and relations of the ... P. 382
Exocœtus, review of American species ... P. 483
volador (n. sp.) ... P. 404
Experiments on animal heat of fishes ... P. 96
Extratropical North America, pediculate fishes of ... P. 30
Felichthys, note on ... P. 832
Fin-rays, development of ... P. 553
Florida ... P. 16, P. 23, P. 24, P. 66, P. 73, P. 74, P. 406, P. 416, P. 426, P. 427, P. 438, P. 508
Florida, east, notes on ... P. 104
new species from .. P. 282, P. 355, P. 402, P. 404, P. 464, P. 465
new species of Ophichthys ... P. 613
notes on fishes from ... P. 537
pipe-fishes of Key West. P. 428
St. Johns River, notes on P. 105
Scaroid fishes from ... P. 414
Flounder, diagnoses of undescribed genera of ... P. 165
new species of ... P. 117, P. 136, P. 152, P. 464
Puget Sound, new species from ... P. 147
Flying fishes, review of the ... P. 483
Frigate mackerel on New England coast ... P. 183
Gadus cimbrius ... P. 50
Galapagos Islands, 1887–88 ... P. 770
list of fishes .. P. 840
Murænoid eel from ... P. 369
Galeorhinus galeus ... P. 111
Gasterosteus atkinsii ... P. 71
gladiuneulus (n. sp.) ... P. 1089
williamsoni ... P. 373
Gastropsetta frontalis (n. sp.) ... P. 1030
Georgia ... P. 28
eastern, notes on fishes .. P. 89
new species from ... P. 453
Gillichthys y-cauda, San Diego, Cal ... P. 774
Glyptocephalus cynoglossus ... P. 10
Gnathanacanthus, note on ... P. 885
Gnathypops mystacinus (n. sp.). P. 404
Gobiesox rhessodon (n. sp.) ... P. 208
Gobiidæ, North American ... P. 587
Gobioides broussoneti ... P. 1029
Gobiomorus ... P. 685
Gobiosoma histrio (n. sp.) ... P. 433
ios (n. sp.) ... P. 298

Fishes. Gramma loreto ..... P. 669
Grand banks of Newfoundland .. P. 78
Great dolphin, note on the ..... P. 548
Great Lake trout ..... P. 682
Greenland ..... P. 431
Green Turtle Cay ..... P. 752
Gulf menhaden ..... P. 25
Gunnels or proper name of butter-fishes ..... P. 1048
Hadropterus aurantiacus ..... P. 504
scierus (n. sp.) ..... P. 379
Hæmulon, review of species of .. P. 436
Hake, new species from South Carolina ..... P. 124
Haloporphyrus viola ..... P. 40
Harriotta, new type of chimæroid fish ..... P. 1014
Hawaiian Islands ..... P. 1114
Hemirhamphus rosæ (n. sp.) .... P. 164
Heptatrema, proper name of .... P. 1234
Hermaphrodite ..... P. 441
Heros beani (n. sp.) ..... P. 719
Heteromi, revision of ..... P. 1013
Hexanchus corinus (n. sp.) ..... P. 167
Hiatula (Lacépède), note on ..... P. 883
Hieroptera, rays with aberrant pectorals ..... P. 1054
Hippocampid fishes ..... P. 1049
Hippocampus antiquorum ..... P. 17
Hippoglossoides elassodon (n. sp.) ..... P. 147
exilis, n. sp. ..... P. 136
Hippoglossus vulgaris ..... P. 70
Hoplopagrinæ, review of ..... P. 449
Hudson's Bay ..... P. 204
Hybognathus hayi, n. sp. ..... P. 467
Hybopsis montanus, n. sp. ..... P. 461
Hypolectrodes ..... P. 1082
Ichthyology, North American, contributions to ..... B. 9, B. 10, B. 12
Ichthyomyzon castaneus ..... P. 271
Icichthys lockingtoni, n. sp. ..... P. 154
Icosteus, n. g. ..... P. 123
ænigmaticus, n. sp. .... P. 123
Illinois ..... P. 273
Indian Territory ..... P. 549
Indiana ..... P. 379, P. 424, P. 681
fishes from White River. P. 423
new species from Tippecanoe River ..... P. 791
Ioglossus, n. g. ..... P. 297
Iowa ..... P. 470
Isesthes gilberti, n. sp. ..... P. 288
Jamaica, Institute of ..... P. 418
Japan ..... P. 1112, P. 1127, P. 1213, P. 1233, P. 1235, P. 1239, P. 1240
Johnston's Island, fishes from ... P. 272
Juan de Fuca, Straits of, new species from ..... P. 171
Julidinæ, review of the ..... P. 552
Kamchatka ..... P. 1112
Kansas ..... P. 624
new species from ..... P. 456
Kentucky, fishes from Clear Fork ..... P. 378
La Cépède, generic names of .... P. 324

Fishes. La Have bank ..... P. 78
Labrax, proper name of ..... P. 712
Labrichthys ..... P. 861
Lagodon, review of ..... P. 608
Lake Michigan, new species of Uranidea from ..... P. 277
Lampreys, nomenclature of ..... P. 989
Lancelets, hagfishes and lampreys of Japan, review of ..... P. 1233
Latiloid genera, note on the .... P. 214
Lepidopsetta isolepis, n. sp. ..... P. 158
Lepidopus, Benthodesmus allied to ..... P. 241
Lepomis euryorus, n. sp. ..... P. 197
Leptocardians ..... P. 307
Leptophidium cervinum, n. sp. .. P. 533
marmoratum, n. sp. ..... P. 533
Letharchus, n. g. ..... P. 297
Leurynnis with Lycodopsis, identity of ..... P. 139
Linnæan collection, American fishes in the ..... P. 510
names of American fishes ..... P. 527
Liparis ranula ..... P. 65
Lipogenys, description of ..... P. 1013
Lobotidæ ..... P. 319
Long Island ..... P. 657
Lopholatilus chamæleonticeps .. P. 77
Lotella maxillaris, n. sp. ..... P. 429
Louisiana ..... P. 271, P. 437
Lucioperca, nomenclature of ... P. 993
Lutjaninæ, osteological characteristics of the .... P. 441
review of ..... P. 449
Lutjanus blackfordii ..... P. 24, P. 657
stearnsii ..... P. 24
Lycodes paxillus ..... P. 64
turneri ..... P. 59
vahlii ..... P. 78
Lycodopsis, identity of Leurynnis with ..... P. 139
Macdonaldia, description of .... P. 1013
Macrurus, n. sp. ..... P. 388
Mail-cheeked fishes, classification of ..... P. 756
Maine ..... P. 1089
(Schoodic Lake) ..... P. 71
Maltheidæ ..... P. 34
Marsipobranchiates ..... P. 308
Massachusetts ..... P. 5, P. 12
Merlucius, genus related to ..... P. 165
Mexico ..... P. 242, P. 291, P. 327, P. 370, P. 433, P. 903, P. 1159
central ..... P. 95
Guaymas ..... P. 846
Gulf of ..... P. 16, P. 200, P. 201, P. 202, P. 203, P. 281, P. 586, P. 675, P. 896
catalogue of fishes from ..... P. 98
mortality of fishes in ..... P. 54, P. 195, P. 217, P. 349
new eel from ..... P. 335

Fishes. Mexico, Mazatlan ..... P. 237, P. 254, P. 452, P. 719
new species from .. P. 221, P. 637
of Etheostoma from. P. 823
of sharks .. P. 268
notes on fishes from .... P. 94
(southern) ..... P. 925
Mississippi ..... P. 179
new species..... P. 467
Mississippi (Lower) ..... P. 430
Mississippi River, new species of Amiurus ..... P. 90
Missouri..... P. 470
Mortality of ..... P. 54, P. 200, P. 203, P. 217, P. 349
Gulf of Mexico.. P. 195, P. 202
Mugilidæ, marine species of .... P. 431
Murænoid eel ..... P. 369
Murænoides, Stathmonotus allied to..... P. 508
Musée d'Histoire Naturelle, Paris, American fishes in..... P. 81
Myctophum crenulare ..... P. 190
n. sp ..... P. 146
Myliobatidæ, nomenclature of.. P. 990
Myriolepis zonifer, n. g. and n. sp..... P. 140
Myrophis vafer, n. sp ..... P. 334
Myxinidæ..... P. 309
Myzonts..... P. 308
Narcobatidæ, synonymy of ..... P. 1050
Nemichthyoid eels, diagnoses of new genera of..... P. 381
Nemichthys avocetta, n. sp ..... P. 170
New England..... P. 77, P. 177, P. 658
descriptions of new species from .... P. 165
frigate mackerel .. P. 183
New Hampshire ..... P. 671
New York (Lower Hudson Valley) ..... P. 811
Newfoundland, new species of Notacanthidæ..... P. 181
Nicaragua..... P. 732
North America, synopsis of ..... B. 16
North American fishes distributed, list of..... P. 127
North American fishes, new species ..... P. 81
North American fishes, nomenclature of .... P. 325
North American fishes, notes on. P. 466
North and Middle America .... B. 47
North Carolina..... P. 504, P. 550
(Beaufort Harbor)..... P. 55
new species from P. 178
occurrence of Phycis regius. P. 124
Notacanthidæ, new species of... P. 184
Notacanthus phasganorus, n. sp. P. 184
Notes on the capture of rare fishes..... P. 1165
Notidanoid shark ..... P. 167
Noturus, review of the genus.... P. 332

Fishes. Noturus, elassochir, n. sp ..... P. 332
Nova Scotia ..... P. 65
Oceanic bonito..... P. 13, P. 42
ichthyology..... Sp. B. 2
Ohio ..... P. 737
Ophichthys, nomenclature of .. P. 336
retropinnis (n. sp.) P. 613
Ophidium beani (n. sp.) ..... P. 355
Opisthocentrus tenuis (n. sp.)... P. 1127
Orcynus pelamys..... P. 42
Orectolobus or Crossorhinus, a genus of sharks..... P. 1057
Oregon ..... P. 20, P. 265
Osmerus attenuatus..... P. 123
Ostraciontidæ (Trunk fishes)... P. 87
Othonops eos (n. sp.)..... P. 187
Oxycottus acuticeps ..... P. 1167
Pacific coast..... P 797, P. 1009
bibliography of fishes of the .. B. 11, P. 233
fishes distributed, list of ..... P. 185
fishes, list of..... P. 173
new Notidanoid shark from..... P. 167
notes on fishes of the .... P. 191
of tropical America, list of ..... P. 526
Panama ..... P. 292, P. 294, P. 327, P. 639
list of fishes from.. P. 329, P. 840
new species from . P. 334, P. 452
Paralepis coruscans (n. sp.)..... P. 171
Parasites of..... P. 1123, P. 1125, P. 1133
Parophrys ischyrus (n. sp.) ..... P. 147
Pastinaca, generic name of ..... P. 514
Pediculate fishes of eastern coast, extratropical North America ..... P. 30
Pediculati..... P. 316
Pempheris poeyi (n. sp.)..... P. 516
Pensacola ..... P. 465, P. 565
Perca flavescens ..... P. 36
Percidæ ..... B. 10
Petromyzontidæ, on the genera of the ..... P. 368
Petromyzontids ..... P. 310
Phycis chesteri..... P. 40
earlii (n. sp.) ..... P. 124
regius in North Carolina. P. 124
Physiculus fulvus (n. sp.)..... P. 429
Plagiogrammus hopkinsi (n. sp.) P. 967
Platessa ferruginea ..... P. 52
rostrata ..... P. 52
Platypœcillus, new species of ... P. 1159
Platyrhina exasperata, generic relations of..... P. 119
Platyrhina triseriata (n. sp.)... P. 108
Platysomatichthys stomias (n. sp.)..... P. 152
Plectromus crassiceps (n. sp.)... P. 486
Plectroplites and Hypolectrodes P. 1082
Pleurogadus ..... P. 853
Pleuronectes glaber..... P. 49
Pleuronectidæ, review of ..... P. 42
Pleuronectids ..... P. 757

Fishes. Pleuronichthys verticalis (n. sp.) P. 117
Pœcilia butleri (n. sp.) P. 719
Pœcilichthys, new species of P. 751
Pœciliidæ, nomenclature of P. 991
Pœcilioid fishes, nomenclature of P. 1060
Pollachius chalcogrammus P. 939
Polynemus californiensis P. 630
Pomacentrus rubicundus, life coloration of P. 337
Pomadasys, new species of P. 242
Pomatomidæ P. 317
Porichthys porosissimus P. 405
Potamocottus bendirei (n. sp.) P. 190
Preserving fishes, directions for collecting and P. 224
Prionistius macellus (n. g. and n. sp.) P. 387
Prionotus ophryas (n. sp.) P. 465
review of P. 574
stearnsi (n. sp.) P. 465
stephanophrys (n. sp.) P. 182
Pristipoma approximans (n.sp.) P. 418
Propterygia, Rays with aberrant pectorals P. 1054
Psectrogaster, new species of P. 1055
Pseudolabrus P. 861
Pseudotriacis microdon P. 357
Psychrolutidæ P. 717
Pterophryne, specific name of P. 32
Ptychochilus harfordi (n. sp.) P. 193
Puget Sound P. 326, P. 753
new flounders from P. 147
new species of Nemichthys from P. 170
Punta Arenas P. 639
Quillehute Indians taking smelt. P. 112
Rachicentron or Elacate P. 1059
Raia inornata P. 194
rhina (n. sp.) P. 141
stellnata (n. sp.) P. 129
Ray, new species P. 108
from California P. 129, P. 141
Rhinobatidæ, synopsis and descriptions of P. 180
Rhinobatus glaucostigma (n. sp.) P. 370
Rhinonemus caudacuta P. 50
Rhinoptera encenadæ (n. sp.) P. 563
Rock fish, new species from California P. 126, P. 176
Rondeletiidæ, bathybial fishes P. 1012
Sable Island bank, new deep-water fish from P. 41
Saccopharyngoid fishes, on the literature and relations of the. P. 408
Saint George's banks P. 17
Saint Michael's (Alaska) P. 70
Salmo mykiss agua-bonita P. 916
Salmon, Chinnook names of P. 244
development of the P. 502
Salmonidæ P. 196
Salmonidæ and Thymallidæ, differential characters of P. 992
Salvelinus aureolus (supposed new species) P. 671
Fishes. Salvelinus, namaycush P. 682
San Diego P. 897
Santa Barbara Islands, new species from P. 880
Santa Lucia, 1888 P. 789
Sargus holbrookii P. 28
Scatophagoid fishes P. 833
Sciæna sciera (n. sp.) P. 452
Scopeloid fishes P. 146
Scorpænoid fish P. 157, P. 161
Scutigeridæ, notes on the P. 625
Scymnus or Scymnorhinus, a genus of sharks P. 1053
Scytalina cerdale (n. sp) P. 144
Sea catfish P. 46
Sebastichthys brevispinis (n. sp.) P. 1027
carnatus (n. sp.) P. 126
chrysomelas (n. sp.) P. 176
entomelas (n. sp.). P. 132
maliger (n. sp.) P. 157
miniatus (n. sp.) P. 125
mystinus P. 192
proriger (n. sp.) P. 161
rhodochloris (n. sp.) P. 132
serriceps P. 109
umbrosus (n. sp.). P. 296
Sebastinæ, Pacific coast P. 1009
Sebastoid fishes, new P. 150
Selachians P. 482
Sema, note on P. 160
Seriola stearnsii (Amber fish) P. 66
Shark, coast of California P. 118
from Mexico, new species of P. 268
from Pacific coast P. 167
new species of P. 269
Siberia, new species from P. 210
Sidera castanea (n. sp.) P. 335
chlevastes (n. sp.) P. 369
Siganidæ, synopsis of genera of. P. 435
Siluridæ, synopsis of the B. 10
Siphostoma scovilli (n. sp.) P. 1043
mckayi (n. sp.) P. 428
South American, catalogue of P. 842
South Carolina P. 627
new hake from P. 124
on a collection of fishes from P. 328
Sparus brachysomus (n. sp.) P. 149
on the genus P. 321
Spheroides, note on P. 758
Spiny box fish, California P. 917
Squalius aliciæ (n. sp.) P. 186
Star-gazer, new species of P. 896
Stathmonotus P. 508
Sternoptychidæ, note on the P. 443
Stichæus punctatus P. 47
Sting-rays, generic name of P. 514
Stizostedion, nomenclature of P. 993
Stoasodon narinari P. 509
Striped bass in Lower Mississippi Valley P. 430
Striped bass, note on P. 485
Sudis ringens (n. sp.) P. 146
Surf-smelt P. 112

Fishes. Swordfish family, taxonomic relations and distribution of .... P. 248
Synchirus (n. g.) ..... P. 787
Synentognathous fishes..... P. 1051
Syngnathid and hippocampid fishes, differential characters of. P. 1049
Syngnathinæ, review of the .... P. 283
Synopsis of the fishes of North America..... B. 16
Tautoga, note on..... P. 883
Temperature to vertebræ, relations of..... P. 845
Terminology of ichthyography.. P. 445
Tetragonopterus, a genus of characinoid fishes..... P. 1061
Tetraodontidæ, review of the... P. 566
Tetraodontoidea, notes on ..... P. 886
Teuthididæ, synopsis of genera of..... P. 435
Teuthidoidea, genera of..... P. 435
Teuthis applied to a genus of fishes ..... P. 1052
Texas .....P. 549, P. 1043
new species from ..... P. 282
Thalassophryne dowi ..... P. 639
Thymallidæ ..... P. 992
Thyris, replaced..... P. 350
Thyrsitops violaceus (n. sp.) .... P. 658
Tilesia..... P. 853
Torpedinidæ or Narcobatidæ, synonymy of ..... P. 1050
Tortugas, destruction of fish in the ..... P. 37
Tropical America, key to fishes of P. 242
Tunnies, generic name of..... P. 965
Tunny and Albicore, generic name of ..... P. 716
Tylosurus euryops (n. sp.)..... P. 418
Unalashka (Alaska) ..... P. 70
Uranidea marginata (n. sp.)..... P. 190
microstoma (n. sp.) ... P. 121
pollicaris (n. sp.)..... P. 277
rhothea (n. sp.) ..... P. 286
Urolophus asterias (n. sp.) ..... P. 327
Utah Lake, collection of fishes from..... P. 175
Utah Lake, new species of Squalius from ..... P. 186
Vancouver's Island, new species of Goby from..... P. 298
Viviparous osseous fishes, development of ..... P. 501
Washington Territory..... P. 112, P. 265, P. 286, P. 388, P. 672
Washington Territory (Neah Bay) ..... P. 144
Water destructive to fishes..... P. 195, P. 200, P. 201, P. 202, P. 203, P. 349
Western gizzard shad ..... P. 43
West Indies, list of..... P. 595
Xenichthys xenurus (n. sp.) .... P. 252
Xenopterus, note on ..... P. 884
Xiphidæ, taxonomic relations and distribution of ..... P. 248
Xiphiids ..... P. 303
Xiphister, n. sp ..... P. 130
Xyrichthys jessiæ (n. sp.)..... P. 675

Fishes. Xystreurys liolepis, a new species of flounder ..... P. 107
Yale College, in museum of..... P. 329
Yellow-finned trout, Twin Lakes, Colo ..... P. 780
Yellow perch, note on scientific name of ..... P. 485
Zeidæ, relationships of..... P. 1155
Zophendum, on the genus ..... P. 822
Zygonectes escambiæ (n. sp.) ... P. 585
inurus (n. sp.)..... P. 273
zonifer (n. sp.)..... P. 453
(See also under Anatomy.)
Fishing vessels, boats, equipment, anglers' outfits, etc. (London Fisheries Exhibition) ..... B. 27
Fish-like vertebrates, diagnoses of new genera and species of ..... P. 380
Flint, James M .....R. 102, C. 6, C. 7, C. 8, C. 19, C. 32
[Flint, James M]..... P. 11
Flora, Washington and vicinity..... C. 46
Florida. Birds..... P. 457
Box-tortoise..... P. 1107
Fishes. P. 16, P. 23, P. 24, P. 66, P. 73, P. 74, P. 104, P. 105, P. 282, P. 355, P. 402, P. 404, P. 406, P. 414, P. 416, P. 428, P. 464, P. 465, P. 508, P. 565, P. 613
Cedar Keys..... P. 426
Lake Jessup and Indian River ..... P. 438
New species of..... P. 537
St. Johns River ..... P. 427
Fossil bones from Tise's Ford.. P. 396
Geology..... P. 263
Insects (Lepidoptera)..... P. 1208
Mammals ..... P. 419
Mollusks ..... P. 384, P. 519
(Unionidæ) ..... P. 911
Muskrat (Neofiber alleni) ..... R. 5
Myriapods ..... P. 631
Reptiles ..... P. 727, P. 1003, P. 1107
Shell-heaps, east coast of..... P. 966
Fontaine, William M..... P. 918, P. 934
Fontaine, William M. (coauthor) ..... P. 821
Food collections, provisional classification of the..... C. 11
plants of scale insects..... P. 1122
Foraminifera, recent, a descriptive catalogue of ..... R. 102
Fordice, Morton W. (coauthor) ..... P. 575
Fossil brachiopod, Trenton limestone .... P. 775
plants. Alabama, new species from P. 688
Alaska..... P. 998
Miocene flora ..... P. 300
Araucarioxylon ..... P. 784
Araucarioxylon arizonicum (n. sp.)..... P. 676
Arizona..... P. 676
Cycadeoidea..... P. 1141
Devonian..... P. 928
Directions for collecting. B. 39 (B)
Erian plants from New York and Pennsylvania. P. 928
Iowa (coniferous) ..... P. 677
Kentucky, Louisiana, Oregon, California, Alaska, Greenland, etc..... P. 679

Fossil plants. Liriodendron, leaves of ... P. 794
Louisiana ... P. 690
Mexico ... P. 821
Miocene flora, Alaska ... P. 300
Montana (coniferous) ... P. 677
Montana (Fort Union group) ... P. 921
Montana (Great Falls coal field) ... P. 918
Nematophyton crassum ... P. 929
New Mexico ... P. 676
New species of ... P. 606
New York ... P. 928
Ohio ... P. 792
Palmoxylon (n. sp.) ... P. 690
Pennsylvania ... P. 928
Platanus, history of the genus ... P. 680
Tertiary ... P. 306
Texas (Trinity div. of Comanche series) ... P. 934
Triassic ... P. 821
trees in New Mexico ... P. 257
Fossils. Acrothele, description of ... P. 114
note on ... P. 1120
Alabama ... P. 1164
Antilles ... P. 1110
Apodidæ, phyllopod ... P. 1117
Arkansas, cretaceous ... P. 207
mesozoic and cenozoic ... P. 137
Basilosaurus cetoides, pelvic girdle of ... P. 1211
Bicia ... P. 1229
Bison of North America ... P. 1172
California ... P. 14, P. 1145, P. 1194
Post-pliocene ... P. 2
Cambrian brachiopods ... P. 1120, P. 1152, 1229
Carboniferous ... P. 113, P. 366
Endothyra ornata P. 91
new species of ... P. 86
Caryophyllia arnoldi (coral) ... P. 1194
new species of ... P. 1194
Cenozoic, from several States ... P. 137
Colorado, cretaceous ... P. 207
mesozoic and cenozoic ... P. 137
Corals ... P. 1194
Cretaceous ... P. 93, P. 115, P. 207
bivalve mollusks ... P. 1109
Stegosaurus marshi (n. sp.) ... P. 1224
Criocardium ... P. 92
Dipeltis and Protocaris ... P. 1117
Directions for collecting and preparing ... B. 39 (K)
Endothyra ornata, note on ... P. 91
Eocene, Alabama, new snake from ... P. 1164
mollusca from Southern United States ... P. 134
Ethmocardium ... P. 92
Florida, bones from Tise's Ford. P. 396
Gasteropod from Puebla, Mexico P. 131
Georgia ... P. 116
Green River group (mollusks) .. P. 266
Fossils. Invertebrates, list of publications relating to collection of .. B. 30
Iphidea and Yorkia ... P. 1120
Japan ... P. 1194
Jelly fishes, middle Cambrian terrane ... P. 1086
Kansas, cretaceous ... P. 93
Laramie group, mollusks from the ... P. 266
Levipalifer orientalis (n. g. and n. sp.) (coral) ... P. 1194
Lingula æqualis, preserving cast of peduncle ... P. 746
Lingulella ... P. 1152
Lower Cambrian ... P. 763
Macrocheilus ... P. 366
Maine, walrus remains in ... P. 223
Mastodon and mammoth, bones and teeth of ... C. 48
Mesozoic and cenozoic types, list of ... P. 520, P. 568
from several States ... P. 137
Straits of Magellan .. P. 793
Mexico, gasteropod ... P. 131
Middle Cambrian ... P. 738
jelly fishes from ... P. 1086
Miocene, Arctic Siberia ... P. 946
Cyprinoid fish ... P. 1212
Leuciscus turneri ... P. 1212
Molluscan forms from Dakota formation ... P. 995
Mollusks ... P. 8, P. 266
Actæon, new species of. P. 1145
Eocene ... P. 134
Productus giganteus ... P. 113
Truckee group, molluscan fauna of ... P. 267
Neocene, corals ... P. 1193
New Mexico, new species from. P. 115
Obolella ... P. 1229
Obolus ... P. 1152, P. 1229
Oldhamia in America, discovery of the genus ... P. 1002
Olenellus zone ... P. 763
Paleozoic fishes ... P. 866
Phyllopod, Apodidæ ... P. 1117
Pinna, n. sp. ... P. 115
Plectostylus ... P. 366
Post-pliocene fossils ... P. 2
Protocaris ... P. 1117
Remondia ... P. 1109
Rhinoceros, miocene, S. Dakota P. 1207
Silurian, Baffin Land ... P. 1192
Soleniscus ... P. 366
Stricklandia davidsoni ... P. 116
salteri ... P. 116
Tertiary, from Antillean region. P. 1110
Leptonacea of North America and West Indies ... P. 1177
southern United States P. 1035
Tortoises ... P. 1181
Texas ... P. 1072
Cretaceous ... P. 93
Triassic unios, Texas ... P. 1072
Trigonias osborni from S. Dakota ... P. 1207

Fossils. Truckee group, fossils of..... P. 267
Unios from Toronto drift ..... P. 952
Upper Cambrian fossils, new forms of ..... P. 820
Utah, mesozoic and cenozoic... P. 137
Walrus remains..... P. 223
Wyoming, mesozoic and Cenozoic ..... P. 137
Yorkia ..... P. 1120
Foster, L. S..... B. 40
Friends of the Museum, letter addressed to C. 2
Fringillidæ, North and Middle America. B. 50 (I)
Funk Island, the expedition to ..... R. 26
Future development of the Nat. Museum. R. 109

G.

Galapagos Islands. Bird skeletons..... P. 798
Birds ..... P. 573, P. 767, P. 1007, P. 1067, P. 1116
Coleopterous insects of ..... P. 1143
Fishes ... P. 369, P. 770, P. 840
Mollusks ..... P. 942
Gane, Henry ..... P. 1193
Garman, Samuel ... P. 180, P. 482, P. 514, B. 25 (VI)
Garman's paper on American salmon and trout, note on ..... P. 490
Gätke, H ..... P. 67
Geare, R. I ..... R. 32, Rep. 1897 (II)
Gelatin casts, on the making of ..... P. 926
Gems and precious stones, plan for illustration of, Cincinnati and New Orleans expositions, 1884–85..... C. 26
in National Museum, descriptive catalogue of ..... R. 121
Genesis of the National Museum[1] ..... R. 55
Geognosy: Materials of the earth's crust. R. 51
Geographical and exploring commission of Mexico, catalogue of animals collected by .... P. 559
investigation, relation of biology to..... R. 64
Geology. (For paleontological papers see under Fossils.)
Asbestos and asbestiform minerals..... P. 1066
Atlantic border, diabase, composition of..... P. 205
Blue mineral from New Mexico P. 978
Bogosloff Island..... P. 479
Building and ornamental stones at New Orleans Exposition, plan for exhibit of.... C. 25
Geology. Building and ornamental stones, the collection of..... R. 12
California (Lower)..... R. 91
Catalogue of minerals and their synonyms ..... B. 33
Diabase, mesozoic, composition of..... P. 205
Directions for collecting rocks and preparation of thin sections..... B. 39 (I)
Geology. District of Columbia..... P. 363, P. 410
mineralogy and lithology of the ..... P. 523
Economic geology and metallurgy, catalogue of systematic collections in..... B. 42
Eruptive rocks from Montana.. P. 1031
Feldspar, determination of .... P. 206
Florida ..... P. 263
Fulgurites..... P. 554
Gem collection ..... R. 11
Gems in National Museum, descriptive catalogue of ..... R. 121
Handbook for department of (Geognosy)..... R. 51
Hornblende andesites..... P. 479
Inclined strata, measuring thickness of ..... P. 739
Jadeite, Burma, analysis of .... P. 981
Little Deer Isle, peridotite from P. 707
Maine ..... P. 707
building stones..... P. 365
granites ..... P. 354
Metallurgy, economic geology, and catalogue of systematic collections in..... B. 42
Hampe's method of determining Cu_2O in metallic copper ..... P. 687
Meteoric iron, Arkansas..... P. 666
Meteorite collection ..... R. 10
collection in National Museum, descriptive catologue of .. R. 122
San Emigdio ..... P. 700
Meteorites, catalogue of collection of..... R. 122
Mineral collections, classification of the..... R. 107
Mineral resources of United States, plan to illustrate, New Orleans Exposition, 1884–85... C. 31
Mineralogical collections, the.. R. 92
Minerals and their synonyms, catalogue of ..... B. 33
catalogue of series illustrating the properties of..... R. 101
directions for collecting..... B. 39 (H)
in National Museum, 1879, list of..... P. 163
Montana ..... P. 1031
Nebraska, volcanic dust in ..... P. 497
Nephrite and jadeite..... P. 696
New York ..... P. 783
Non-metallic minerals ..... R. 111
Ontonagon copper bowlder .... R. 94
Onyx marbles..... R. 75
Pennsylvania ..... P. 341, P. 783

[1] Also reprinted in Museum Report for 1897, Vol. II.

Geology. Petrographic report on rocks from United States-Mexico boundary ..... P. 1173
Potsdam sandstone ..... P. 341
Preliminary handbook to the department of..... R. 44
Prochlorite from District of Columbia ..... P. 410
Sandstone concretions, formation of..... P. 987
Sandstone, phosphatic..... P. 263
Serpentine, Montville, N. J ... P. 694
Serpentinous rocks..... P. 783
Stalactites and gypsum incrustations in caves ..... P. 985
Topaz crystals..... P. 1148
Truckee group ..... P. 267
Volcanic dust in Nebraska.... P. 497
Geophilidæ, descriptions of new genera of..... P. 837
George Catlin Indian gallery..... R. 8
Georgia. Fishes..... P. 28, P. 89, P. 453
Fossils ..... P. 116
Gephyræa, northeastern coast..... P. 76
Gilbert, Charles H..... P. 130, P. 423, P. 424, P. 456, P. 607, P. 753, P. 759, P. 774, P. 797, P. 823, P. 840, P. 856, P. 880, P. 1115, P. 1161
Gilbert, Charles H. (coauthor).. P. 55, P. 106, P. 107, P. 108, P. 109, P. 110, P. 111, P. 117, P. 118, P. 119, P. 125, P. 126, P. 129, P. 130, P. 132, P. 135, P. 136, P. 141, P. 144, P. 146, P. 147, P. 150, P. 151, P. 152, P. 153, P. 154, P. 156, P. 157, P. 161, P. 162, P. 164, P. 167, P. 170, P. 171, P. 173, P. 174, P. 175, P. 176, P. 181, P. 191, P. 192, P. 193, P. 194, P. 221, P. 227, P. 237, P. 242, P. 252, P. 254, P. 268, P. 269, P. 273, P. 277, P. 282, P. 289, P. 290, P. 291, P. 292, P. 293, P. 294, P. 296, P. 298, P. 324, P. 325, P. 326, P. 327, P. 328, P. 329, P. 334, P. 335, P. 336, P. 352, P. 355, P. 367, P. 368, P. 369, P. 370, P. 401, P. 402, P. 403, P. 417, P. 152, P. 549, P. 639, P. 939, P. 1114, P. 1131, B. 16
Gill, Theodore..... P. 30, P. 31, P. 32, P. 33, P. 34, P. 139, P. 214, P. 302, P. 303, P. 304, P. 307, P. 308, P. 309, P. 310, P. 316, P. 317, P. 318, P. 319, P. 320, P. 321, P. 322, P. 380, P. 435, P. 443, P. 444, P. 445, P. 448, P. 668, P. 669, P. 684, P. 685, P. 712, P. 716, P. 717, P. 756, P. 757, P. 758, P. 803, P. 804, P. 805, P. 815, P. 816, P. 817, P. 818, P. 825, P. 831, P. 832, P. 833, P. 834, P. 835, P. 853, P. 861, P. 883, P. 884, P. 885, P. 886, P. 965, P. 989, P. 990, P. 991, P. 992, P. 993, P. 1048, P. 1049, P. 1050, P. 1051, P. 1052, P. 1053, P. 1054, P. 1055, P. 1056, P. 1057, P. 1058, P. 1059, P. 1060, P. 1061, P. 1082, P. 1234, B. 11
Gill, Theodore (coauthor) .... P. 381, P. 382, P. 408
Gillette, Clarence P..... P. 1138
[Girard, Charles] ..... P. 500
Girard, Charles, the published writings of. B. 41
Glazier, W. C. W..... P. 203
Gloriosa Island. Birds..... P. 1008, P. 1079
Insects..... P. 1119
Natural history of ..... P. 973
Golden patera of Rennes..... R. 85
Goode, G. Brown[1] ..... R. 33, P. 4, P. 5, P. 6, P. 15, P. 17, P. 41, P. 58, P. 73, P. 87, P. 165, P. 177, P. 183, P. 184, P. 248, P. 350, B. 5, B. 6, B. 14, B. 18, B. 20, B. 27, B. 41, B. 49, R. 36, R. 55, R. 62, R. 70, R. 71, R. 72, C. 1, C. 11, C. 13, C. 43, C. 44, C. 45, C. 46, C. 47
Goode, G. Brown (coauthor) ... P. 10, P. 13, P. 16, P. 23, P. 24, P. 26, P. 40, P. 41, P. 50, P. 52, P. 53, P. 64, P. 65, P. 66, P. 68, P. 74, P. 77, P. 78, P. 98, P. 211, P. 241, P. 281, P. 297, P. 406, P. 510, P. 533, P. 543, P. 1012, P. 1013, P. 1011, B. 25, Sp. B. 2
Goode, G. Brown, bibliography of. Rep. 1897 (II)
memorial volume of ..... Rep. 1897 (II)
Grampus, birds observed by, 1887 ..... P. 819
Graphic arts, catalogue of exhibit of, Cincinnati Exposition, 1888..... C. 37
Gray, Asa..... P. 462
Gray shrike, Yezo ..... P. 931
Great Auk, history and anatomy of the.. R. 26
[Grebnitski, Nikolai A.]..... P. 562, P. 1106, P. 1112, P. 1127
Green Turtle Cay. Fishes ..... P. 752
Greenland. Eskimo harpoon ..... P. 702
Fishes..... P. 431
Fossil plants ..... P. 679
Grenada. Birds..... P. 45
Catalogue of..... P. 596
Guadeloupe. Birds ..... P. 57
Guatemala. Birds ..... P. 7
Reptiles ..... P. 1151
[Günther, Dr.] ..... P. 58
Guppy, R. J. Lechmere (coauthor)..... P. 1110

H.

Hampe's method of determining Cu_2O in metallic copper..... P. 687
Handbook to department of geology ..... R. 44
Harger, Oscar..... P. 75
Harpoons, aboriginal American..... R. 117
Havard, V ..... P. 535
Havasu-pai Indians..... P. 859
Hawaiian and Fanning islands, contributions to natural history of ..... B. 7
Hawaiian Archipelago, Kauai Island:
Hawaiian Islands. Birds ..... P. 609, P. 640, P. 692, P. 778
Fishes ..... P. 1114
Mollusks and brachiopods ..... P. 1032
Reptiles ..... P. 1174
Hawes, George W ..... P. 205, P. 206, P. 263
Hay, O. P ..... P. 179, P. 512, P. 537, P. 624, P. 907, P. 908, P. 909, P. 1181
Hay, W. P ..... P. 935, P. 1176, P. 1187
Heap, G. H..... P. 393
Hegewald, J. T. C. (coauthor)..... P. 257
Heilprin, Angelo ..... P. 134
Heligoland. Birds..... P. 67
Helminthology. (See under Parasitology.)
[Hemphill, Henry]..... P. 384
[Henshall, J. A.]..... P. 104
[Henson, Harry V.]..... P. 904

[1] In addition to the papers here indicated several others relating to museum history and administration, and also to American science and scientific institutions, were reprinted in the Museum Report for 1897, Vol. II.

Hermaphrodite fishes ..... P. 441
Hermit crabs of Pagurus bernhardus type. P. 1261
Hill, Meriden S ..... R. 114
Hippisley, Alfred E..... R. 25, R. 118
Hippisley collection of Chinese porcelains..... R. 118
Hitchcock, Romyn ..... R. 13, R. 14, R. 49, R. 50, R. 58, R. 59, R. 60, P. 745, C. 24
Hoffman, Walter J ..... R. 90
[Höhnel, Lieut. von]..... P. 1063, P. 1098
Holland, W. J ..... P. 1062, P. 1063, P. 1064, P. 1065, P. 1098
Holm, Theodore ..... P. 741, P. 791, P. 910
Holmes, Wm. H ..... R. 116
Honduras. Birds ..... P. 665, P. 868
Mammals..... P. 744, P. 1069
Hopi ceremonial pigments..... R. 120
Hornaday, Wm. T..... R. 15, R. 21, C. 12, C. 22
Horned toads, ejection of blood from eyes of..... P. 907
Hough, Walter ..... R. 22, R. 27, R. 47, R. 57, R. 77, R. 101, R. 113, R. 120, P. 703, P. 705
[Hovey, Edmund Otis] ..... B. 39 (M)
Howard, L. O .. P. 771, P. 881, P. 905, P. 1025, P. 1142
Howard, L. O. (coauthor) ..... P. 1092
Howgate Polar Expedition, contributions to natural history of Arctic America, in connection with the..... B. 15
Hudson Bay Territory, Naskopie Indians, drum of..... P. 736
Hudson's Bay fishes ..... P. 204
Hughes, Elizabeth G. (coauthor)..... P. 552, P. 574, P. 608
Human beast of burden..... R. 18
Humbert, Fred ..... P. 348
Humming birds, The..... R. 45
Hunt, J. G ..... P. 347
Hydroids, Alaska..... P. 1171
American. Part 1. The Plumularidæ..... Sp. B. 4
Northeastern coast ..... P. 531
Puget Sound..... P. 1171

I.

Ichthyography, terminology of..... P. 445
If public libraries, why not public museums? ..... R. 82
Illinois. Botany ..... P. 261
Fishes ..... P. 273
India. Anthropology..... R. 68
Minute stone implements from .. R. 68
Indian Ocean. Crustaceans ..... P. 979
Porpoises, skeletons and skulls of..... P. 982
Indian paintings, Catlin..... R. 8, R. 52
Indian Territory. Fishes ..... P. 549
Mollusks..... P. 740
Indiana. Batrachians ..... P. 512
Botany ..... P. 264, P. 1010
Crustaceans ..... P. 935
Fishes..... P. 379, P. 423, P. 681, P. 791
Switz City swamp..... P. 424
Myriapods..... P. 632, P. 731
Reptiles ..... P. 729
Indians, Alaska and British Columbia ... R. 24
Havasu-pai..... P. 859
Kwakiutl ..... R. 89
Ingersoll, Ernest..... P. 195
Inman, S. M ..... P. 333
Inscriptions in stone, etc., instructions for taking paper molds of ..... C. 23
Insects. Africa, East..... P. 1062
West ..... P. 951
"Albatross," collected by, 1887–88 ..... P. 771
Aldabra Island ..... P. 1119
Coleoptera. Africa, East ..... P. 1091
Aldabra, Gloriosa, and Providence islands ..... P. 1119
Chlamydini, review of the..... P. 1130
Chrysomelidæ, new species of .. P. 1130
Coleopterous insects of Galapagos Islands..... P. 1143
Echocerus, new species of ..... P. 1041
Golden beetle, from Costa Rica. P. 1040
Lachnosterna of temperate North America ..... P. 747
New species of..... P. 1113
Scarabæidæ ..... P. 1096
Scolytid beetles, synonymy of.... P. 1085
Tana River and Jombéné range.. P. 1094
Tenebrionid genus, Echocerus, new species of ..... P. 1041
Concerning the department of . C. 4
Costa Rica ..... P. 1040
Diptera. Cluster flies, note on . P. 331
Empidæ, North American..... P. 1073
Japanese . ..... P. 1146
Lucilia macellaria (parasitic) ..... P. 348
New species of ..... P. 1225
Porto Rico ..... P. 1198
Syrphidæ, North American, synopsis of the .... B. 31
Systematic arrangement of the families of ..... P. 1228
Directions for collecting and preserving ..... B. 39 (F, L, O)
Gloriosa, Seychelles, Aldabra, and Providence islands ..... P. 1119
Hemiptera Heteroptera .... P. 924
Homoptera. Coccidæ, food plants of. P. 1122
Homoptera. Scale insects (Coccidæ), directions for collecting and preserving ..... B. 39 (L)
Homoptera. Scale insects, distribution of ..... P. 1026

Insects. Hemiptera Homoptera. Typhlocybinæ, American leaf-hoppers ..... P. 1138
Japan ..... P. 1108
Hessian fly (parasites of) ..... P. 532
Hymenoptera. Bothriothoracine insects .. P. 1025
Braconidæ, descriptions of new species of P. 760
Chaleid flies, Encyrtinæ ... P. 1202
Chalcididæ, biology of ..... P. 881
Cynipidous galls and gall wasps ..... P. 1102
Encyrtinæ ..... P. 1202
Encyrtinæ with branched antennæ..... P. 905
Hessian fly (parasites of). P. 532
Hymenopterous family, Chalcididæ ..... P. 881
Hymenopterous insects from Ceylon (parasitic) ..... P. 1092
Ichneumonidæ, new species of P. 779
Ichneumonoidea, classification of..... P. 1206
Proctotrypidæ, North American ..... B. 45
Tenthredinidæ, Japanese..... P. 1157
Jumping seeds and galls..... P. 330
Lepidoptera. Africa, East ..... P. 1098
Agrotis, revision of species of ... B. 38
Aldabra, Seychelles, and other islands ..... P. 1064
Callimorpha, North American species of.. P. 634
Cucullia, revision of the genus... P. 890
Cydosia and Cerathosia ..... P. 706
Deltoid moths, revision of the. B. 48
Dicopinæ, revision of the..... P. 891
Eastern Africa .. P. 1062
Euerythra, the species of..... P. 633
Florida..... P. 1208
Hadena, revision of species of... P. 839
Homohadena, revision of species of..... P. 838
Insects. Lepidoptera. Kashmir ..... P. 1065
Lepidoptera from Somaliland ... P. 1063
Mamestra, revision of species of..... P. 851
Morrisonia, revision of ..... P. 892
Moths, directions for collecting . C. 27
Moths, North American, life histories of.... P. 1209
Noctuidæ, a hundred new moths of the family..... P. 1203
Noctuidæ of boreal America.. P. 890, P. 891, P. 892
Noctuidæ of temperate North America..... P. 781, P. 838, P. 839, P. 851
Noctuidæ, North America, new genera and species of..... P. 647
Noctuidæ of temperate North America, contributions toward a monograph of the insects of the lepidopterous family ..... B. 38
Nocturnal moths, Campometra .. P. 1184
North American, bibliography of described transformations of..... B. 35
revision of Acronycta..... P. 1140
Saturniidæ ..... P. 581
Somaliland ..... P. 1063
Tæniocampid genera ..... P. 781
Tineina, new moths of superfamily ..... P. 1208
Xylomiges, revision of ..... P. 892
Lepidopterous family Noctuidæ, contributions toward a monograph of the.. B. 48
Superfamily Noctuidæ, catalogue of species of..... B. 44
Louisiana ..... P. 440
Neuroptera. Biting lice (Mallophaga) from birds and mammals ..... P. 1183

Insects. Neuroptera. Dragon flies, stone flies, and May flies, directions for collecting and rearing .. B. 39 (o)
Odonata. Africa, East.. P. 1045, P. 1047
Orthoptera. Acrididæ (n. g. and n. sp.)..... P. 761
Acrididæ, revision of the Melanopli..... P. 1124
Melanopli, revision of the ..... P. 1124
Sphærium, new species of..... P. 415
Trimerotropis, revision of..... P. 1215
Protection of anatomical preparations..... P. 12
Providence Island..... P. 1119
Tennessee ..... P. 714
Installation methods ..... R. 70
of collections, plan for the... C. 16
Institutions, foreign and domestic, to receive Museum publications ..... R. 35
Instructions for collecting birds' eggs.... C. 30
taking paper molds, etc . C. 23
International Fisheries Exhibition, London, catalogues of exhibits of the United States at the..... B. 27
Iowa. Fishes ..... P. 470
Fossil coniferous wood ..... P. 677
Iron manufacture in Virginia..... P. 489
Isopods. (See under Crustaceans.)

J.

Jackson, J. B. S ..... P. 12
Jamaica. Fishes ..... P. 418
Reptiles ..... P. 1218
Yellow boa of ..... P. 1218
Japan. Ainos of Yezo..... R. 50
Anthropology.... R. 58, R. 59, R. 60, P. 836
Bird fauna of..... P. 906
Birds..... P. 390, P. 473, P. 579, P. 641, P. 649, P. 904, P. 931, P. 974, P. 997
notes on ..... P. 383
of Liu Kiu ..... P. 597
Blenny-like fish, Volcano Bay... P. 1127
Crustaceans (Isopods) ..... P. 1189
Fishes ..... P. 1112, P. 1127, P. 1213, P. 1233, P. 1235, P. 1239, P. 1240
Fossil corals..... P. 1194
Fossils..... P. 1194
Insects. Diptera ..... P. 1146
Hemiptera..... P. 1108
Hymenoptera ..... P. 1157
Mammals..... P. 557
Playing cards from..... P. 836
Water birds..... P. 598
Japanese birds, notes on .... P. 957
review of (No. I)..... P. 558
(No. II)..... P. 578
(No. III)..... P. 579
(No. IV)..... P. 601
(No. V)..... P. 628
(No. VI)..... P. 642
(No. VII) ..... P. 667
Japanese birds, review of (No. VIII) ..... P. 735
(No. IX)..... P. 751
Science College, Tokyo .. P. 874
cotton fibers, catalogue of ..... P. 250
husbandry, account of .. P. 251
hymenoptera ..... P. 1157
lacquer, preparation of..... P. 745
legation, account of cotton husbandry prepared by. P. 251
catalogue of cotton fibers prepared by .. P. 250
quails, remarks on ..... P. 974
reed warbler..... P. 997
wood cutting and wood-cut printing ..... R. 63
woods, catalogue of ..... P. 232
Jefferson, J. P..... P. 54
Jefferson, J. P. (coauthor)..... P. 37
Jenkins, Oliver P. (coauthor).. P. 681, P. 698, P. 846
Jewish ceremonial objects in National Museum, Benguiat collection of..... R. 115
Johnson, S. H ..... P. 217
Johnstons Island. Fishes..... ..... P. 272
Jones, J. Matthew ..... B. 25 (III)
Jones, J. Matthew (coauthor)..... B. 25
[Jones, W. H.] ..... P. 854
Jordan, David S..... P. 20, P. 81, P. 84, P. 94, P. 104, P. 105, P. 159, P. 160, P. 178, P. 288, P. 404, P. 405, P. 416, P. 422, P. 433, P. 437, P. 438, P. 451, P. 466, P. 467, P. 485, P. 490, P. 500, P. 503, P. 511, P. 526, P. 527, P. 550, P. 551, P. 565, P. 593, P. 595, P. 630, P. 648, P. 652, P. 675, P. 682, P. 719, P. 723, P. 732, P. 789, P. 822, P. 829, P. 845, P. 916, P. 938, B. 9, B. 10
Jordan, David S. (coauthor)..... P. 55, P. 106, P. 107, P. 108, P. 109, P. 110, P. 111, P. 117, P. 118, P. 119, P. 125, P. 126, P. 129, P. 130, P. 132, P. 135, P. 136, P. 141, P. 144, P. 146, P. 147, P. 150, P. 151, P. 152, P. 153, P. 154, P. 156, P. 157, P. 161, P. 162, P. 164, P. 167, P. 170, P. 171, P. 173, P. 174, P. 175, P. 176, P. 181, P. 185, P. 191, P. 192, P. 193, P. 194, P. 221, P. 227, P. 237, P. 242, P. 252, P. 254, P. 268, P. 269, P. 273, P. 277, P. 282, P. 289, P. 290, P. 291, P. 292, P. 293, P. 294, P. 296, P. 298, P. 324, P. 325, P. 326, P. 327, P. 328, P. 329, P. 334, P. 335, P. 336, P. 352, P. 355, P. 367, P. 368, P. 369, P. 370, P. 378, P. 401, P. 402, P. 403, P. 414, P. 417, P. 426, P. 427, P. 434, P. 436, P. 447, P. 449, P. 450, P. 452, P. 453, P. 465, P. 470, P. 483, P. 484, P. 549, P. 552, P. 566, P. 574, P. 575, P. 586, P. 587, P. 627, P. 639, P. 752, P. 770, P. 780, P. 791, P. 939, P. 1213, P. 1232, P. 1233, P. 1235, P. 1239, P. 1240, B. 12, B. 16, B. 47
Jouy, Pierre L ..... R. 28, P. 186, P. 383, P. 975
Jouy, Pierre L. (coauthor) ..... P. 185
[Jouy, Pierre L.] ..... P. 1235
Juan de Fuca, Straits of. Fishes..... P. 171
Judd, Sylvester D..... P. 1084

K.

Kalb, George B ..... P. 332
Kamchatka, ornithology of ..... B. 29
Kansas. Fishes ..... P. 456, P. 624
Fossils..... P. 93
Kashmir. Birds..... P. 1078
Insects (Lepidoptera)..... P. 1065

Kashmir. Mammals ..... P. 976, P. 1004
Kellogg, Vernon L ..... P. 1183
Kendall, W. C ..... P. 1089
Kendall, W. C. (coauthor) ..... P. 1043
Kentucky. Fishes, new species from Clear Fork ..... P. 378
Fossil plants ..... P. 679
Kerguelen Island. Contributions to natural history of. Part I. Ornithology... B. 2
Part II. General natural history ..... B. 3
Kidder, J. H ..... P. 96, B. 2, B. 3
Kilima-njaro, ethnological collections from ..... R. 56
mammals from ..... P. 915
Kirsch, Philip H ..... P. 754
Kishinouye, K ..... P. 1188
Knowlton, Frank H ... P. 513, P. 676, P. 677, P. 690, P. 784, P. 921, P. 998, B. 39 (B)
Knowlton, Frank H. (coauthor) ..... P. 821
[Knowlton, Frank H.] ..... P. 606, P. 679
[Knudsen, Valdemar] ..... P. 609, P. 778
Koehler, S. R ..... R. 46, C. 37
Korean collections of Bernadou, Allen, and Jouy ..... R. 57
Korean mortuary pottery, the collection of R. 28
Kumlien, Ludwig ..... B. 15
Kunz, George F ..... R. 11, P. 666
Kuril Islands. Birds ..... P. 1144
Kutenai canoe, notes on the ..... R. 114
Kwakiutl Indians, houses of ..... P. 709
social organization and secret societies of the ..... R. 89

L.

Labeling, methods of ..... R. 70
Labrador. Birds ..... P. 518
Crustaceans ..... P. 375
dredged, 1882 ..... P. 374
Echinoderms dredged, 1882 .. P. 377
Explorations in ..... R. 42
Mollusks ..... P. 561
dredged, 1882 ..... P. 377
Natural history of ..... P. 353
Ladak. Birds ..... P. 1078
La Have bank. Fishes ..... P. 78
Lake Michigan. Fishes ..... P. 277
Lamp of the Eskimos ..... R. 101
Langley, S. P ..... C. 36
[Larco, Andrea] ..... P. 296
Lawrence, George Newbold ..... P. 19, P. 27, P. 35, P. 45, P. 51, P. 57, P. 61, P. 103, P. 142, P. 166, P. 216, P. 545, P. 653, B. 4
[Lawrence, George Newbold, editor] ..... P. 596
Lawrence, George Newbold, the published writings of ..... B. 40
Lea, Isaac, the published writings of ..... B. 23
Leeches in the National Museum ..... P. 1160
Lefroy, John Henry ..... B. 25 (II)
Lepidoptera. See under Insects.
Leptocardians. (See under Fishes.)
[Leslie, Charles C.] ..... P. 627
Lesquereux, Leo . P. 300, P. 606, P. 679, P. 688, P. 792
Lesser Antilles. Birds ..... P. 61
Letters on work of National Museum, 1881. C. 10
Leyden Museum, taxidermy in the ..... R. 95
Liberia. Birds ..... P. 1182
Libraries, foreign and domestic, to receive Museum publications ..... R. 35
Library, circular requesting material for the ..... C. 14
Life Histories of North American Birds .. Sp. B. 1 and 3
Lilljeborg, W ..... P. 621
Linell, Martin L ..... P. 1040, P. 1094, P. 1096, P. 1113, P. 1119, P. 1130, P. 1143
Linton, Edwin. P. 636, P. 893, P. 1123, P. 1125, P. 1133
Little Swan Island. Mammals ..... P. 744
Lizards of North America ..... R. 110
Lo Bianco, Salvatore ..... B. 39 (M)
Lockhart, J. G ..... P. 827
Lockington, W. N ..... P. 72, P. 97, P. 120, P. 121, P. 122, P. 123, P. 140, P. 149, P. 158, P. 182, P. 209
London Fisheries Exhibition, catalogues of the exhibits sent by the United States to the ..... B. 27
Long Island. Fishes ..... P. 657
Lönnberg, Einar ..... P. 1003, P. 1107
Lord, Edwin C. E ..... P. 1173
Louisiana. Fishes ..... P. 271
from vicinity of New Orleans ..... P. 437
Fossil plants ..... P. 679
Fossil wood ..... P. 690
Insects from vicinity of New Orleans ..... P. 440
Lower Siam. Birds ..... P. 1201
Lucas, Frederic A ... R. 26, R. 40, R. 42, R. 78, R. 93, P. 495, P. 622, P. 704, P. 798, P. 830, P. 848, P. 1001, P. 1077, P. 1095, P. 1164, P. 1172, P. 1207, P. 1211, P. 1212, P. 1224, B. 39 (C), C. 33, C. 48
Lucas, Frederic A. (coauthor) ..... R. 6, P. 765
Lugger, Otto ..... P. 213
Lupton, N. T ..... P. 46
Lyon, Marcus W., jr ..... P. 1228

M.

McGuire, J. D ..... R. 87, R. 103
McKay, Charles L ..... P. 197
[McKay, Charles L.] ..... P. 513, P. 564
McMurrich, J. Playfair ..... P. 930
McNeill, Jerome ..... P. 631, P. 632, P. 1215
MacFarlane, R ..... P. 865
Madagascar. Birds ..... P. 1118, P. 1197
Madrid Exposition, participation of the Smithsonian Institution in the ..... R. 71
Magellan Straits. Bird skeletons ..... P. 798
Birds ..... P. 768
Maine. Fishes ..... P. 71, P. 1089
Fossils ..... P. 223
Geology ..... P. 354, P. 365, P. 707
Mammal skins for study and mounting .. R. 15
Mammals. Africa, East ..... P. 915
Kilima-njaro ..... P. 814
Tana River ..... P. 954
Iaska ..... P. 399, P. 495
Bristol Bay, list of mammals from ..... P. 564
Aquatic mammals, catalogue of (London Fisheries Exhibition) ..... P. 27
Armadillo (Xenurus) occurring in Honduras ..... P. 1069

Mammals. Atalapha semota (n. sp.) ..... P. 807
Baltistan ..... P. 976
Bats, new species of ..... P. 786
North American ..... P. 919
North American, monograph of the ..... B. 43
Bering Island ..... P. 540
Bison, American, extermination of the ..... R. 21
Black-tailed deer ..... P. 287
Bottlenose porpoise, on life history of ..... P. 812
British America ..... P. 827
California ..... P. 492, P. 623
Canada lynx, cranial characters of the ..... P. 603
porcupine ..... P. 44, P. 213
Capromys, new species of .... P. 744
Cariacus clavatus (n. sp.) .... P. 734
columbianus ..... P. 287
Carollia brevicauda (n. sp.) .. P. 824
Catskill Mountains ..... P. 1147
Central America ..... P. 734, P. 963
Cinnamon bear ..... P. 338
Costa Rica ..... P. 850
Cotton rat, New Mexico ..... P. 994
Cricetodipus parvus, a rare rodent ..... P. 256
Delphinidæ, review of the ... B. 36
Diphylla ecaudata, notes on. P. 1099
Dipodomys compactus (n. sp.) P. 699
study of the genus ..... P. 580
Directions for preparing study specimens of small mammals ..... B. 39 (N)
Dymecodon pilirostris (n. g. and n. sp.) ..... P. 557
Echinomys semispinosus in Nicaragua ..... P. 743
Erethizon dorsatus ..... P. 213
Felis concolor ..... P. 323
Florida ..... P. 419
muskrat ..... R. 5
Fruit bat, new species of ..... P. 948
Geomys personatus (n. sp.) ... P. 699
Glossophaga villosa (n. sp.) .. P. 1100
Guide to collection of (Cincinnati Exposition, 1888) ... C. 41
Hares, new subgenus and six new species of ..... P. 1081
Hesperomys melanophrys ... P. 850
trueí (n. sp.) .... P. 529
Histriophoca (see Phoca) .... P. 394
Honduras ..... P. 744, P. 1069
Hyperoodon semijunctus .... P. 541
Indian Ocean ..... P. 982
Japan ..... P. 557
Kashmir ..... P. 1004
Kilima-njaro region, catalogue of mammals from .... P. 915
Little Swan Island ..... P. 744
Loncheres armatus in Martinique, West Indies ..... P. 468
Lynx, Canada ..... P. 603
Lynx, Urocyon, Spilogale, and Mephites, Mexican boundary ..... P. 1126

Mammals. Maryland ..... P. 213
Mephitis, Dorcelaphus, and Dicotyles, Mexican boundary ..... P. 1129
Mesoplodon stejnegeri (n. sp.) P. 540
Mexican boundary ... P. 1075, P. 1081, P. 1103, P. 1126, P. 1129, P. 1132
Mice from Costa Rica and Mexico ..... P. 850
Mole, new genus and species of ..... P. 557
revision of the ..... P. 1101
Moose, habits of the ..... P. 827
Mules in milk ..... P. 278
Neofiber alleni ..... P. 419
Neotoma, diagnoses of ..... P. 1006
New Mexico ..... P. 994
New York ..... P. 1147
Nicaragua ..... P. 743
North American, diagnoses of new mammals ..... P. 999
Nyctinomus europs (n. sp.) .. P. 1151
orthotis ..... P. 786
Oregon ..... P. 826
Ovis montana, new geographical race of ..... P. 399
Pennsylvania, bear from ..... P. 338
Phenacomys longicaudus (n. sp.) ..... P. 826
Phoca fasciata, skeleton of ... P. 394
Phocæna dalli (n. sp.) ..... P. 495
Phyllostome bats, new genus of ..... P. 913
new subfamily of P. 912
Plan for collection of (New Orleans Exposition, 1884–85) C. 29
Porcupine, Canada ..... P. 44, P. 213
Porpoise, new species from Alaska ..... P. 495
Prodelphinus doris of Gray, spotted dolphin, apparently identical with ..... R. 4
Pteropus aldabrensis (n. sp.). P. 948
Puget Sound ..... P. 602
Puma, or American lion ..... R. 39
Rocky Mountain goat, habits of the ..... P. 88
Rytina gigas ..... P. 344
Sciurus, Castor, Neotoma, and Sigmodon, Mexican boundary ..... P. 1132
Scotophilus temminckii ..... P. 914
Sea-cow ..... P. 344
Sea-elephant, account of capture of ..... P. 492
Sigmodon minima (n. sp.) ... P. 994
Sitomys decolorus (n. sp.) .... P. 963
taylori, relationship of ..... P. 972
Sminthus in Kashmir ..... P. 1004
Steller's Sea-cow, date of extermination of ..... P. 421
Taylor's mouse, relationship of ..... P. 972
Temminck's bat ..... P. 914
Texas ..... P. 699

Mammals. Tursiops, life history of..... P. 812
Vale of Kashmir..... P. 976
Vampire bat, notes on the ... P. 1099
Vespertilio longicrus (n. sp.). P. 602
Vespertilionidæ, genera of... P. 920
Vesperugo hesperus..... P. 659
Virginia deer, antlers of ..... P. 358
West Indian seal (Monachus tropicalis)..... R. 6
West Indies ..... P. 468
West Virginia, Canada porcupine in..... P. 44
Whale fishery and its appliances ..... B. 27
Whalebone whales, nomenclature of the..... P. 1163
Whales, new species of ..... P. 344
Xenurus ..... P. 1069
Mancala, the national game of Africa.... R. 84
Manitoba, birds of..... P. 841
Mann, Albert..... P. 937
Man's knife of the North American Indians ..... R. 106
Manual of American land-shells ..... B. 28
Marcou, John Belknap..... P. 520, P. 568, B. 30
Margarita Island. Birds..... P. 1093
Marietta Exposition, report on the participation of the Smithsonian Institution and National Museum in the ..... R. 33
Marine animals at Naples Zoological Station, preservation of..... B. 39 (M)
invertebrates, Littoral marine fauna of Provincetown ..... P. 128
New England coast, distributed ..... P. 82
New England coast, Series II, distributed .... P. 230
New England coast, Series III, distributed .... P. 231
New England coast, Series IV, distributed .... P. 371
New genera and species of..... P. 168
New genus and species of ..... P. 534
New species of... P. 169
Northeastern coast ..... P. 76, P. 168, P. 169, P. 281, P. 534
Marlatt, C. L ..... P. 1157
Marsipobranchiates. (See under Fishes.)
Martinique. Birds..... P. 51
Marx, George..... P. 782
Marx, George (coauthor)..... P. 951
Maryland. Mammals..... P. 213
Mason, Otis T..... R. 1, R. 2, R. 16, R. 18, R. 38, R. 48, R. 83, R. 106, R. 112, R. 114 R. 117, P. 531, P. 730, P. 776, P. 932, P. 1015
Massachusetts. Fishes..... P. 5, P. 42
Littoral fauna of Provincetown..... P. 128
Mollusks (Marthas Vineyard)..... P. 284
Mastodon and Mammoth, relating to .... C. 48
Materia medica. Atropia on the heart, influence of ..... P. 198
Cinchona barks in National Museum..... P. 582
Collection, arrangement of the ..... C. 6
classification of the ... C. 19, C. 32
memorandum to collectors of .. C. 8
Drugs, request for specimens of..... C. 20
Matthews, Washington..... R. 52
Maxon, Wm. R ..... P. 1226
Mazyck, William G ..... P. 584
Mearns, Edgar A... P. 994, P. 1075, P. 1081, P. 1103, P. 1121, P. 1126, P. 1129, P. 1132, P. 1147
Meek, Fielding B., the published writings of ..... B. 30
Meek, Seth E..... P. 461, P. 737
Meek, Seth E. (coauthor) ..... P. 427, P. 428, P. 450, P. 453, P. 470, P. 483
Merriam, C. Hart ..... B. 25 (V)
Merrill, George P.. R. 12, R. 44, R. 51, R. 75, R. 91, R. 111, P. 341, P. 354, P. 363, P. 365, P. 410, P. 479, P. 497, P. 523, P. 554, P. 694, P. 700, P. 707, P. 783, P. 985, P. 987, P. 1031, P. 1066, B. 39(I), C. 25
Merrill, George P. (coauthor) ..... P. 696
Merrill, James C ..... P. 22, P. 88
Mesozoic and cenozoic types in National Museum, list of..... P. 520
Metallic casting of delicate natural objects ..... P. 212
Meteoric iron, Arkansas..... P. 666
Meteorite collection in National Museum ..... R. 10, R. 122
Meteorite, San Emigdio ..... P. 700
Mexican boundary. Mammals .. P. 1075, P. 1081, P. 1103, P. 1126, P. 1129, P. 1132
Mollusks ..... P. 1033
Petrographic report on rocks from.... P. 1173
Mexico. Anthropology ..... P. 932
Birds..... P. 385, P. 617, P. 895, P. 945, P. 962, P. 1045, P. 1091
collected by Geographical and Exploring Commission ..... P. 559
from southwestern Mexico, catalogue of..... B. 4
Catalogue of reptiles and batrachians of..... B. 32
Fishes..... P. 94, P. 95, P. 221, P. 237, P. 242, P. 254, P. 268, P. 291, P. 327, P. 335, P. 370, P. 452, P. 637, P. 719, P. 823, P. 846, P. 903, P. 925, P. 1159
from Guaymas ..... P. 433
Fossil plants, Triassic..... P. 821
Fossils ..... P. 131
Gulf of. Birds..... P. 652
Echini ..... P. 491, P. 544
Fishes ..... P. 16, P. 54, P. 98, P. 195, P. 201, P. 202, P. 203, P. 217, P. 281, P. 586, P. 675, P. 896, P. 1029
Medusæ from ..... P. 528

Mexico, Gulf of. Stalked crinoids..... P. 547
Water from ..... P. 222
Mammals, collected by Geographical and Exploring Commission ..... P. 559
Reptiles and batrachians ..... P. 922
collected by Geographical and Exploring Commission ..... P. 559
Sponges ..... P. 542
Microscopical mounts of vegetable textile fibers ..... R. 11
Middle America, birds from ..... P. 655
Middle Cambrian fossils..... P. 738
Miller, Gerrit S., jr..... B. 39 (N)
[Mills, Clark] ..... P. 79
Mineral collections, classification of the. R. 107
Mineralogical collections, the..... R. 92
Mineralogy. (See under Geology.)
Minerals and their synonyms ..... B. 33
catalogue of series illustrating the properties of..... R. 104
the nonmetallic ..... R. 111
Minneapolis Exposition, report on participation of the Smithsonian Institution in the..... R. 23
Minnesota. Mollusks..... P. 1190
Mississippi. Fishes ..... P. 179, P. 467
Mississippi River. Fishes..... P. 90
Mississippi River (Lower). Fishes..... P. 430
Missouri. Fishes..... P. 470
Mollusks ..... P. 651
[Mitsukuri, Professor]..... P. 1108
Mollusks. Africa, West..... P. 940
Agriculture, Department of, list of shells received from. P. 844
Alaska ..... P. 1, P. 48
American land, fresh-water, and marine shells..... P. 813
Antilles, Solenidæ of..... P. 1185
Arctic region..... P. 48
Auriculacea ..... P. 519
Bering Sea..... P. 571
Bering Sea Island ..... P. 562
Brachiopods, index to names applied to subdivisions of.. B. 8
Bulimulus..... P. 958
California .. P. 18, P. 536, P. 898, P. 1191
new land shell from P. 584
California (Lower) ..... P. 536, P. 958
Cardiidæ, synopsis of the..... P. 1214
Chitons..... P. 48
eastern coast of United States..... P. 246
on genera of..... P. 228
Commander Islands..... P. 442
Concerning the identification of..... C. 47
Costa Rica..... P. 11
Cuba ..... P. 790
Cytherea crassatelloides, notes on ..... P. 1149
Economic mollusks, appliances for capture and preparation for market (London Fisheries Exhibition) ..... B. 27
Mollusks. Florida ..... P. 384
land and fresh-water shells of ..... P. 519
Galapagos Islands ..... P. 942
Gnathodon, monograph of... P. 988
Haliotis fulgens, new variety of..... P. 1191
Hyalina sterkii (n. sp.)..... P. 710
Indian Territory, land and fresh-water shells from..... P. 740
Instructions for collecting .. B. 39 (G)
International Boundary Commission of United States and Mexico ..... P. 1111
Labrador ..... P. 377
Land-shells, American, manual of..... B. 28
Leptonacea, North America and West Indies..... P. 1177
Limpets ..... P. 48
eastern coast of the United States..... P. 246
Lucinacea, synopsis of the.... P. 1237
Martha's Vineyard ..... P. 284
Mexican boundary survey.... P. 1033
Minnesota ..... P. 1190
Missouri ..... P. 651
Naiades, synopsis of..... P. 1205
North American land, fresh-water, and marine shells... P. 971
North Labrador and Arctic seas..... P. 561
Northeastern coast..... P. 76, P. 168
Pacific coast..... P. 1034
Pearly fresh-water mussels... P. 1068
Pearly fresh-water mussels, synopsis of..... P. 1205
Point Barrow expedition..... P. 460
Pteropods and Heteropods, collected by "Albatross," 1887–88..... P. 913
Pupidæ, new subgenus of .... P. 726
Revision of deep-water mollusca, Part I, Bivalvia..... P. 1139
San Pedro Bay..... P. 898
Selenites cœlata (n. sp.) ..... P. 584
duranti ..... P. 584
Shell-bearing marine mollusks and brachiopods, southeastern coast of United States, preliminary catalogue of..... B. 37
Shells from Heron and Eagle lakes, Minnesota ..... P. 1190
Solenidæ of North America and Antilles..... P. 1185
South America ..... P. 854
Tahiti ..... P. 1238
Tellinidæ, synopsis of the .... P. 1210
Tres Marias and other localities ..... P. 996
Turbinella pyrum, anatomy of P. 521
Unionidæ of Florida and southeastern States..... P. 911
Unios, Ozark region ..... P. 651
Veronicella (slug)..... P. 1238

Mollusks. Vertigo, American species of. P. 726
Vertigo cubana (n. sp.) P. 790
West American shells dredged by "Albatross," 1888 P. 849
West coast of North and South America P. 941
West Indian region P. 1011
Mollusks and brachiopods, collected by "Albatross" (1887-88) P. 773
Mollusks and brachiopods, Hawaiian Islands P. 1032
Montana. Fossil coniferous wood P. 677
plants P. 918, P. 921
Geology P. 1031
Montandon, A. L. P. 924
Moore, Charles R. 94
Moore, J. Percy P. 1160
Moore, M. A. P. 202
Moore, Thomas (coauthor) P. 37
Morse, Edward S R. 82
Mount Vernon, stone age at P. 730
Murbach, Louis P. 1097
Murdoch, John R. 3, P. 459, P. 702
Museum administration, principles of Rep. 1897 (II)
catalogues R. 32
classification, outline of scheme of C. 13
history and museums of history Rep. 1897 (II)
methods, recent advances in R. 70
Museum, National, genesis of the[1] R. 55
Museums of the future[1] R. 36
public R. 82
Musical scales, history of R. 119
Myological specimens, preparation of P. 243
Myriapods. Africa P. 968
West P. 951
Blind species from Luray Cave P. 181
Chilopods. Geophilidæ, arrangement of P. 1039
Chilopods. Geophilus attenuatus P. 1038
Congo P. 1036
Ctenoïulus (n. gen.) P. 968
Cuba P. 720
Diplopods. African, Gomphodesmidæ. P. 1170
African, Pachybolus P. 1168
Merocheta P. 1154
New genus from Surinam P. 1037
Polydesmoidea. P. 1042
Striariidæ P. 1169
Strongylosomatidæ, revision of P. 1137
Florida, Escambia County, new species from P. 631
Fontaria pulchella (n. sp.). P. 714
Geophilidæ, notes on the P. 837
Indiana P. 731
new species from P. 632
Myriapods. List of P. 181
Lithobiidæ, notes on the P. 625
Lysiopetalidæ, list of P. 181
Nat. Mus. collection P. 722
North American B. 46
new species P. 670
Oxydesmus (diplopoda) P. 1036
Scolopendrellidæ, genera of the P. 280
Scutigeridæ, notes on the P. 625
Tennessee P. 721
Virginia P. 181
Myzonts. (See under Fishes.)

N.

[Namiye, M.] P. 597, P. 649
Naples Zoological Station, preservation of marine animals at the B. 39 (M)
National Museum. An account of the R. 97
Exhibition cases R. 70
Future development R. 109
Genesis of the[1] R. 55
Installation R. 70
Labeling R. 70
Organization and administration of C. 1
Organization and objects of the C. 15
Police system in C. 1
Natural history of Lower California R. 91
Navajo belt-weaver P. 860
Navajo, evolution of house building among the P. 902
Navajo shoemaker P. 697
tanner P. 683
Naval architecture, prehistoric R. 61
Nebraska. Geology P. 497
Needham, James G B. 39 (O)
Nelson, E. W P. 395, P. 399
Nelson, Elias P. 1230
Nematoda, northeastern coast P. 76
Nemertina, northeastern coast P. 76
Nevada. Fossil cyprinoid (Miocene) P. 1212
Newberry, J. S P. 306
New Brunswick. Anthropology (shell-mounds) P. 229
New England. Anthropology (shell-mounds) P. 229
Crustaceans P. 172
decapod P. 455
Fishes P. 77, P. 165, P. 177, P 183, P. 658
Isopods P. 75
Newfoundland. Explorations in R. 42
Fishes P. 184
New Hampshire. Fishes P. 671
New Jersey. Geology (serpentine) P. 694
New Mexico. Birds P. 432
Crustaceans P. 1128
Fossils P. 115
Fossil wood P. 676
Geology P. 978
blue mineral P 978
Mammals P. 994

[1] Also reprinted in Museum Report for 1897, Vol. II.

New Orleans Exposition. Plan for collection of building and ornamental stones ..... C. 25
Plan for collection of mammals ..... C. 29
Plan for illustrating gems and precious stones ..... C. 26
Plan for illustrating the textile industries ..... C. 24
Plan to illustrate the mineral resources of the United States ..... C. 31
Report on Smithsonian exhibit at the ..... R. 9
Sketch of Smithsonian exhibit at the ..... R. 7
New York. Anthropology ..... P. 351
Fishes ..... P. 811
Fossil plants ..... P. 928
Mammals of Catskills ..... P. 1147
Serpentinous rocks ..... P. 783
Niblack, A. P ..... R. 24, P. 718, C. 23
Nicaragua. Birds ..... P. 391, P. 947, P. 1090
Fishes ..... P. 732
Mammals ..... P. 743
[Nichols, Lieut. Henry E.] ..... P. 221, P. 255, P. 227, P. 387
Nomenclator Zoologicus (1882) ..... B. 19
Nomenclature of North American birds .. B. 21
whalebone whales ..... P. 1163
Nonmetallic minerals ..... R. 111
Norsk naval architecture ..... P. 583
North America. Batrachians of ..... B. 34
Fishes of, synopsis of the. B. 16
Myriapods of ..... P. 670
North American bats, introduction to monograph of ..... P. 919
North American bats, monograph of ..... B. 43
North American birds, life histories of ..... Sp. B. 1, Sp. B. 3
North American birds, nomenclature of . B. 21
North American ichthyology, contributions to (I) ..... B. 9
(II) ..... B. 10
(III) ..... B. 12
North American Syrphidæ, synopsis of the ..... B. 31
North and Middle American birds ..... B. 50
North and Middle American fishes ..... B. 47
North Carolina. Annelids (Polychæta) . P. 852
Fishes. P. 55, P. 124, P. 178, P. 504
Beaufort ..... P. 550
North Pacific surveying expedition, Phronimidæ collected by the ..... P. 258
Norway. Birds ..... P. 686
Nova Scotia. Fishes ..... P. 65
Nutting, Charles C ..... P. 295, P. 305, P. 391, P. 1171, Sp. B. 4
[Nye, W.] ..... P. 420

O.

[Ober, Frederick A.] ..... P. 19, P. 27, P. 35, P. 45, P. 51, P. 57, P. 61
Oberholser, Harry C ..... P. 1080, P. 1153, P. 1180, P. 1182, P. 1195, P. 1196, P. 1197
Oceanic ichthyology ..... Sp. B. 2
Ohio. Cloth from mound in ..... P. 347
Fishes from Maumee Valley ..... P. 737
Fossil plants ..... P. 792
Harvest-spiders, catalogue of .... P. 950
Phalangiidæ ..... P. 950
Oil, porpoise, manufacture of ..... P. 9
Ontonagon copper bowlder ..... R. 94
Onyx marbles, origin, composition, and uses of ..... R. 75
Oölogy of North American birds, comparative ..... R. 69
Orcutt, Charles R. (coauthor) ..... P. 536
Oregon. Fishes ..... P. 20, P. 265
Fossil plants ..... P. 679
Mammals ..... P. 826
Organization and administration, National Museum, 1881 ..... C. 1
Oriental antiquities, exhibit of section of (Cincinnati Exposition, 1888) ..... C. 39
Orinoco district. Birds ..... P. 589
Ornithology of Kerguelen Island ..... B. 2
Osteology. (See under Comparative anatomy.)
[Otaki, Keinosuke] ..... P. 1213

P.

Pacific coast. Birds ..... P. 85, P. 799
Crustaceans ..... P. 933
Fishes ..... P. 147
P. 167, P. 173, P. 185, P. 191, P. 233, P. 797, P. 1009
Isopods, key to the ..... P. 1175
Mollusks ..... P. 1034
Shells dredged by "Albatross" ..... P. 849
(Tropical America) fishes, apodal ..... P. 856
(Tropical America) list of fishes from ..... P. 526
Packard, R. L ..... P. 978
Palawan Islands. Birds, list and distribution of ..... P. 1134
Paleontology. (See under Fossils.)
Pallas' cormorant, contributions to history of ..... P. 765
cranium of ..... P. 1095
Palmer, Wm ..... P. 819
Panama. Fishes ..... P. 292
P. 294, P. 327, P. 329, P. 334, P. 452, P. 639, P. 840

Parasitology, avian entozoa, notes on .... P. 893
biting lice (Mallophaga)... P. 1183
Cestode parasites of fishes.. P. 1125
Cestode parasites of fishes, larval..... P. 1123
Chalcid flies, genera of..... P. 1202
Ichneumon flies, classification of..... P. 1206
leeches in U. S. National Museum..... P. 1160
Lucilia macellaria infesting man ..... P. 348
parasites of Hessian fly .... P. 532
parasitic copepods, descriptions of..... P. 572
parasitic copepods, Lernanthropus ..... P. 664
parasitic copepods, list of .. P. 454
parasitic copepods, Perrisopus..... P. 664
parasitic copepods, Trebius P. 664
parasitic hymenopterous insects ..... P. 1092
parasitic insects of subfamily Encyrtinæ..... P. 1142
tapeworms of hares and rabbits..... P. 1105
trematode parasites of fishes P. 1133
parasite from hen's egg..... P. 636
Paris Exposition, 1889, anthropology at the..... R. 51
Peck, James I ..... P. 943
Penhallow, D. P..... P. 928, P. 929
Pennsylvania. Fossil plants..... P. 928
Geology ..... P. 341
Mammals..... P. 338
Serpentinous rocks..... P. 783
Pensacola. Fishes..... P. 465, P. 565
Persepolitan casts, two ..... R. 80
Peru. Birds..... P. 643
Petroleum collections, with reference to . C. 3
Petropaulovski. Birds..... P. 345
Philadelphia Exhibition, catalogue of exhibit of animal resources and fishes by the Smithsonian Institution at the ..... B. 14
Philippine Islands. Birds, list and distribution of..... P. 1134
Ornithology (Parts I and II)..... P. 1134
Phillips, Barnet ..... C. 10
Phyllostome bats, new subfamily of ..... P. 912
Physiology. Fishes, relations of temperature to vertebræ among.. P. 845
Slider terrapin, influence of temperature on the heart of the ..... P. 515
Pipes and smoking customs of North American aborigines..... R. 103
Pirz, Anthony ..... P. 226
Pit dwellers of Yezo, ancient..... R. 49
Plaster casts, method of making and preserving ..... P. 226
Plateau, Felix ..... P. 243
Plumularidæ, the ..... Sp B. 4
Poey, Felipe ..... P. 3
Point Barrow Expedition, shells collected by the..... P. 460
Pointed bark canoes of the Kutenai and Amur..... R. 114
Poisonous snakes of North America..... R. 73
Polar expedition, Howgate..... B. 15
Police system in Museum ..... C. 1
Polyzoans, northeastern coast..... P. 76
[Pond, Lieut. Chas. F.]..... P. 725
Porifera (sponges), Camaraphysema ..... P. 145
Chesapeake Bay ..... P. 145
London Fisheries Exhibition ..... B. 27 (B)
Mexico (fresh-water). P. 542
northeastern coast... P. 76
Porpoise oil, manufacture of ..... P. 9
Porter, J. H..... R. 17
Porter, Joseph Y..... P. 200
Porter, Joseph Y. (coauthor)..... P. 37
Porto Rico. Birds..... P. 238
Insects (diptera) ..... P. 1198
Potomac tidewater region, archæology of P. 776
Pottery, an early West Virginia..... R. 113
Potts, Edward ..... P. 542
Pratt, R. H ..... P. 29, P. 79
Prehistoric anthropology, a study of ..... R. 29
exhibit of department of (Cincinnati Exposition, 1888) ..... C. 40
relating to department of . C. 42
archæology. (See under Anthropology)
art ..... R. 98
Prentiss, D. Webster (coauthor) ..... B. 26
Preparation:[1] gelatin casts..... P. 926
Japanese lacquer ..... P. 745
metallic casting of delicate natural objects..... P. 212
myological specimens..... P. 243
plaster casts, making and preserving..... P. 226
rough skeletons..... B. 39 (C)
Semper's method of making anatomical preparations . P. 220
Preservation of specimens from insects and effects of dampness ..... R. 22
Prime, Temple ..... P. 415
Primitive American armor ..... R. 77
frame for weaving narrow fabrics..... R. 112
methods of drilling..... R. 87
travel and transportation..... R. 83
Principles of museum administration ..... Rep. 1897 (II)
Protozoans, foraminifera, recent, a descriptive catalogue of ..... R. 102
Vorticella, chlorophylloid granules of..... P. 398
Proudfit, S. V..... P. 810
Providence Island. Insects ..... P. 1119
Publications of National Museum, list of, 1882..... C. 18
Puget Sound. Fishes .. P. 170, P. 326, P. 753, P. 939

[1] See also under Directions for Collecting, and Taxidermy.

Puget Sound. Hydroids ..... P. 1171
Mammals. ..... P. 602
Puma, or American lion..... R. 39
Punta Arenas. Fishes..... P. 639

R.

Rafinesque's "Analyse de la Nature," note on ..... P. 648
Memoirs on North American fishes, review of..... B. 9
Rail and track, American, development of the..... R. 41
[Ralph, Dr. W. L.]..... C. 50
Rathbun, Mary J ..... P. 901, P. 927, P. 933, P. 959, P. 979, P. 980, P. 984, P. 986, P. 1070, P. 1071, P. 1104, P. 1158, P. 1162, P. 1199
Rathbun, Mary J. (coauthor)..... P. 858
Rathbun, Richard ..... P. 82, P. 128, P. 230, P. 231, P. 371, P. 454, P. 491, P. 544, P. 547, P. 569, P. 572, P. 604, P. 635, P. 646, P. 664, B. 27, C. 50
Rau, Charles..... P. 253, C. 21
Reid, Savile G ..... B. 25 (IV)
Relief-printing in the fifteenth and sixteenth centuries ..... R. 46
Religious history and ceremonials, collections illustrating..... R. 81
Rensselaer, Mrs. J. King van ..... P. 836
Reptiles. Africa, East ..... P. 857, P. 862
Bahama Islands..... P. 1219
Barissia, on the genus ..... P. 809
Bascanion flagellum ..... P. 1022
Bermuda..... B. 25 (VI)
Box-tortoises of North America P. 1019
Butler's garter snake ..... P. 1021
California ..... P. 623, P. 689, P. 766, P. 878, P. 944, P. 977, P. 1020, P. 1044
California, Gulf of..... P. 800
California, Lower ..... P. 788
Chamæleo abbotti (n. sp.)..... P. 857
Chamæleon, new species from Kilima-njaro ..... P. 857
Charina, new species of ..... P. 689
on the genus..... P. 808
Clarion Island..... P. 800, P. 1231
Cnemidophorus labialis (n. sp.) P. 788
martyris (n. sp.)..... P. 863
Coachwhip snake, specific name of ..... P. 1022
Colubrine snakes, North American, new genus and species of..... P. 802
Congo Free State ..... P. 969
Crocodilians, lizards, and snakes of North America.... R. 110
Ctenosaura palearis (n. sp.) ... P. 1151
Eutainiæ, Indiana ..... P. 729
Florida ..... P. 727, P. 1107
Guatemala ..... P. 1151
Hawaiian Islands ..... P. 1174
Horned toads, ejection of blood from eyes of ..... P. 907
Iguana, spiny-tailed, new species of ..... P. 1217
Indiana ..... P. 729
Jamaica ..... P. 1218
Reptiles. Lichanua, on the genus..... P. 878
Lygosoma kilimensis (n. sp.).. P. 862
Malaclemys, turtles of the genus..... P. 908
Mexico ..... P. 922
New species of, in National Museum ..... P. 359
North American snakes, notes on ..... P. 876
Phyllorhynchus browni (n. g. and sp.) ..... P. 802
Poisonous snakes of North America ..... R. 73
Pseudemys rugosa, influence of temperature on heart of..... P. 515
San Pedro Martir Island ..... P. 863
Sauromalus, new species of ... P. 864
Sceloporus variabilis, notes on. P. 873
Scincoid lizard, new ..... P. 862
Siredon lichenoides, observations on ..... P. 199
Snakes, breeding habits, etc.. P. 909
Snakes of North America, poisonous..... R. 73
Snakes of North America, review of characters and variations of ..... P. 882
Socorro Island..... P. 800
Spiny-tailed Iguana, Guatemala ..... P. 1151
Storeria dekayi..... P. 678
Tantilla eiseni (n. sp.)..... P. 1044
Thamnophis butleri..... P. 1021
Tropidonotus, new species of.. P. 615
Typhlops præocularis (n. sp.).. P. 969
Uta mearnsi (n. sp.) ..... P. 1020
Utila Island, Honduras..... P. 1217
Verticaria beldingi (n. sp.).... P. 977
Virginia ..... P. 1150
Reptiles and Batrachians, Africa, East .. P. 970
"Albatross," collected by, 1887–88..... P. 769
Bahama Islands ..... P. 645
Central America, catalogue of .... B. 32
Directions for collecting.. B. 39 (E)
Florida ..... P. 1003
Mexico .. P. 922, P. 559
Mexico, catalogue of .... B. 32
New species of P. 299
North American, check list of .... B. 1, B. 24
Texas ..... P. 728
Rhode Island, sand-fleas ..... P. 1084
Rice, Wm. North..... B. 25 (I)
Richardson, Harriet ..... P. 1128, P. 1175, P. 1189, P. 1222
Richmond, Charles W ..... P. 947, P. 1024, P. 1078, P. 1083, P. 1090, P. 1091, P. 1093, P. 1118, P. 1200, P. 1201

Ridgway, Robert ..... R. 45, P. 7, P. 21, P. 38, P. 39, P. 60, P. 102, P. 138, P. 155, P. 188, P. 189, P. 198, P. 215, P. 219, P. 234, P. 235, P. 236, P. 238, P. 240, P. 247, P. 259, P. 262, P. 264, P. 270, P. 285, P. 311, P. 312, P. 315, P. 339, P. 345, P. 356, P. 360, P. 361, P. 362, P. 390, P. 392, P. 400, P. 411, P. 412, P. 420, P. 432, P. 446, P. 457, P. 458, P. 471, P. 472, P. 474, P. 475, P. 476, P. 477, P. 478, P. 480, P. 481, P. 488, P. 493, P. 494, P. 496, P. 522, P. 524, P. 538, P. 539, P. 555, P. 556, P. 567, P. 573, P. 588, P. 589, P. 590, P. 591, P. 599, P. 600, P. 605, P. 611, P. 612, P. 616, P. 617, P. 618, P. 619, P. 626, P. 643, P. 644, P. 650, P. 654, P. 655, P. 656, P. 660, P. 661, P. 665, P. 674, P. 691, P. 693, P. 708, P. 750, P. 761, P. 762, P. 767, P. 768, P. 796, P. 828, P. 867, P. 868, P. 869, P. 870, P. 871, P. 872, P. 877, P. 895, P. 923, P. 945, P. 953, P. 955, P. 956, P. 960, P. 961, P. 962, P. 964, P. 1007, P. 1008, P. 1010, P. 1045, P. 1067, P. 1074, P. 1076, P. 1079, P. 1116, B. 21, B. 27, B. 39 (A), B. 50
[Ridgway, Robert, editor] ..... P. 56, P. 305, P. 313, P. 314, P. 386, P. 391
Riley, Charles V..... P. 330, P. 532, P. 951, B. 39 (F)
Robinson, Wirt ..... P. 733, P. 1093
Rockhill, William Woodville ..... R. 79
Rose, Joseph N. (coauthor)..... P. 749, P. 801
Rothrock, J. T..... P. 397
[Rowell, Rev.] ..... P. 294
[Russell, I. C.] ..... P. 688
Ryder, John A ..... P. 145, P. 181, P. 280, P. 398, P. 501, P. 502, P. 553
Ryder, John A. (coauthor).... P. 381, P. 382, P. 408
Ryder, John A., remarks on Semper's method of making dry preparations, by. P. 220

S.

Sable Island bank. Fishes..... P. 41
St. Croix, botany of ..... B. 13
St. Georges banks. Fishes ..... P. 17
St. Paul's Island. Mesozoic fossils ..... P. 793
St. Peter's Island. Mesozoic fossils..... P. 793
St. Vincent. Birds ..... P. 27
Salamander. Typhlotriton spelæus (n. g. and n. sp.)..... P. 894
San Diego, fishes of..... P. 897
Sandstone concretions, formation of ..... P. 987
Sandwich Islands. Birds ..... P. 236
Crustaceans ..... P. 933
San Pedro Bay. Mollusks..... P. 898
San Pedro Martir Id., new lizard from ... P. 863
Santa Barbara Islands. Fishes ..... P. 880
Santa Lucia. Birds ..... P. 768
Fishes ..... P. 789
Satoh, H ..... R. 86
"Savannah," log of the ..... R. 53
Schuchert, Charles..... P. 1117, P. 1192, B. 39 (K)
Scientific investigation of the sea and fresh waters (London Fisheries Exhibition) ..... B. 27
taxidermy for museums ..... R. 65
Sclater, Philip Lutley, the published writings of..... B. 49
Scofield, Norman Bishop (coauthor)..... P. 1131
Scollick, J. W..... P. 926
Scudder, N. P..... B. 23
Scudder, Samuel H..... B. 19, P. 1124
Sea nettles, urticating organs of ..... P. 1097
Selachians. (See under Fishes.)
Semper's method (dry preparations) ..... P. 220
Seychelle Islands. Birds ..... P. 1079
Lepidoptera ..... P. 1064
Shell-bearing marine mollusks and brachiopods, s. e. coast of United States..... B. 37
Shell-heaps. Florida, east coast ..... P. 966
Shells. (See under Mollusks.)
Shinto, or mythology of the Japanese .... R. 58
Shofar, the ..... R. 66
its use and origin..... P. 936
Shufeldt, R. W..... R. 65, R. 69, R. 95, P. 245, P. 439, P. 440, P. 529, P. 638, P. 683, P. 711, P. 713, P. 859, P. 860, P. 889, P. 902
[Shufeldt, R. W.] ..... P. 437
Siberia. Birds..... P. 274
Fishes ..... P. 210
Simpson, Chas. T..... P. 740 P. 911, P. 952, P. 1011, P. 1068, P. 1072, P. 1205
Skeletons, on the preparation of..... C. 33
Slade, Elisha ..... P. 409
Smith, Hugh M..... P. 806, P. 1150
Smith, John B ..... P. 581, P. 633, P. 634, P. 647, P. 706, P. 747, P. 781, P. 838, P. 839, P. 851, P. 890, P. 891, P. 892, P. 1184, P. 1203, B. 38, B. 44, B. 48
Smith, John B. (coauthor)..... P. 1140
Smith, Rosa..... P. 133, P. 187, P. 208, P. 286, P. 337, P. 372, P. 373, P. 376, P. 469, P. 563
Smith, Rosa (coauthor)..... P. 272
Smith, Sidney I ..... P. 83, P. 99, P. 172, P. 343, P. 374, P. 375, P. 455, P. 506, P. 507
Smith, Silas B ..... P. 244
Snakes, North American, notes on ..... P. 876
poisonous, of North America..... R. 73
Snakes of North America, crocodilians, lizards, and..... R. 110
Snyder, John O. (coauthor)..... P. 1213 P. 1233, P. 1235, P. 1239, P. 1240
Socorro Island. Botany..... P. 801
Reptiles..... P. 800
Somaliland. Lepidoptera..... P. 1063
South America. Fishes, catalogue of .... P. 842
Mollusks ..... P. 854
South Carolina. Fishes..... P. 124, P. 328, P. 627
South Dakota. Fossil rhinoceros ..... P. 1207
Spiders. (See under Arachnids.)
Sponges (Porifera), Camaraphysema..... P. 145
Chesapeake Bay ..... P. 145
London Fisheries Exhibition ..... B. 27 (B)
Mexico (fresh-water) P. 542
northeastern coast... P. 76
Spotted dolphin ..... R. 4
Stalactites and gypsum incrustations .... P. 985
Stanton, Timothy W..... P. 1109, P. 1135
Starks, Edwin C..... P. 1155, P. 1179, P. 1186
Starks, Edwin C. (coauthor) ..... P. 1232
Stearns, R. E. C ..... R. 19, P. 346, P. 813, P. 844, P. 854, P. 940, P. 941, P. 942, P. 971, P. 996, P. 1145, P. 1149, P. 1190, P. 1191
Stearns, Silas ..... P. 25, P. 548

[Stearns, Silas] ..... P. 74, P. 465, P. 565
Stearns, W. A ..... P. 353
[Stearns, W. A.] ..... P. 374
Steindachner, Franz ..... P. 36
Stejneger, Leonhard.... R. 73, P. 239, P. 260, P. 261, P. 275, P. 301, P. 344, P. 413, P. 421, P. 425, P. 463, P. 473, P. 530, P. 558, P. 560, P. 570, P. 576, P. 577, P. 578, P. 579, P. 592, P. 597, P. 601, P. 609, P. 610, P. 614, P. 628, P. 629, P. 640, P. 641, P. 642, P. 649, P. 667, P. 686, P. 692, P. 695, P. 701, P. 735, P. 751, P. 766, P. 778, P. 788, P. 802, P. 808, P. 809, P. 857, P. 862, P. 863, P. 864, P. 873, P. 874, P. 875, P. 876, P. 878, P. 894, P. 904, P. 906, P. 931, P. 944, P. 957, P. 969, P. 970, P. 974, P. 977, P. 997, P. 1020, P. 1021, P. 1022, P. 1023, P. 1044, P. 1088, P. 1144, P. 1151, P. 1174, P. 1178, P. 1217, P. 1218, P. 1219, P. 1220, P. 1231, B. 29, B. 39 (E)
[Stejneger, Leonhard] ..... P. 345, P. 442, P. 462, P. 540, P. 621, P. 1106, P. 1112
Stejneger, Leonhard (coauthor) .....P. 765, P. 847
Steller's sea-cow, date of extermination of. P. 421
Stephen, Alexander M ..... P. 697
Sterki, V ..... P. 726
Stevenson, James, biographical notice of. R. 34
Stiles, Charles Wardell ..... P. 1105
Stone age at Mount Vernon ..... P. 730
Stone implements, District of Columbia.. P. 810
from India ..... R. 68
Stone, Livingston ..... P. 323
[Streets, Thomas H.] ..... P. 638
Streets, Thos. H ..... B. 7, P. 258
[Sumichrast, Francis E.] ..... B. 4
Surinam (Diplopods) ..... P. 1037
Swain, Joseph ..... P. 283, P. 379
Swain, Joseph (coauthor) ..... P. 272, P. 332, P. 378, P. 414, P. 426, P. 428, P. 434, P. 436, P. 447, P. 449, P. 465
Swaine, P. T. (coauthor) ..... P. 257
Swan, James G ..... P. 112, P. 143
Swastika, the ..... R. 88
Synopsis of the North American Syrphidæ B. 31

T.

Tahiti. Mollusks ..... P. 1238
Tassin, Wirt ..... R. 92, R. 104, R. 107, R. 121, R. 122, B. 39 (H)
Taxidermy,[1] classification of collection illustrating ..... C. 12
directions for removing and preserving skins of small mammals ..... C. 22
mammal skins for study and mounting ..... R. 15
scientific taxidermy for museums ..... R. 65
taxidermical methods in Leyden Museum ..... R. 95
[Taylor, William] ..... P. 728
Taylor, W. E ..... P. 1019
Technology. (See under Anthropology.)
Temminck's bat ..... P. 914
Tennessee. Insects ..... P. 914
Myriapods ..... P. 721
Test, Frederick C ..... P. 1156
Test, Frederick C. (coauthor) ..... P. 847
Texas. Batrachians ..... P. 715, P. 1088
and reptiles ..... P. 728
Birds ..... P. 22, P. 673, P. 964
Botany ..... P. 535
Crustaceans ..... P. 1087
Fishes ..... P. 282, P. 549, P. 1043
Fossil plants ..... P. 934
Fossils ..... P. 93
(Triassic unios) ..... P. 1072
Mammals ..... P. 699
On the zoological position of .... B. 17
Textile fibers and fabrics ..... R. 13
fibers, microscopical mounts of .. R. 14
industries, plan of illustration, (New Orleans Exposition, 1884–85) ..... C. 24
Thomas, Cyrus ..... C. 28
Thompson, Ernest E ..... P. 841
Thomson, W. J ..... R. 37
Throwing-sticks from Mexico and California ..... P. 932
in the National Museum. R. 1
Tibet, ethnology of ..... R. 79
Tokuno, T ..... R. 63
Tokyo, University of, Japanese woods presented by ..... P. 232
Tongues of birds ..... R. 93
Topaz crystals ..... P. 1148
Tortoises. Xerobates, on the land tortoises of the genus ..... P. 249
Tortugas. Fishes ..... P. 37
Townsend, Charles H... P. 492, P. 623, P. 799, P. 806
[Townsend, Charles H.] ..... P. 469, P. 665, P. 960
Transportation, exhibit of department of, (Cincinnati Exposition, 1888) ..... C. 38
Trematode from white of egg ..... P. 636
Trematode parasites of fishes ..... P. 1133
Trenton limestone, brachiopod from..... P. 775
Tres Marias. Mollusks ..... P. 996
Trinominals in American ornithology ... P. 413
Tropical America, birds from ..... P. 474
tailless batrachian from ..... P. 847
True, Frederick W ..... R. 4, R. 5, R. 39, R. 97, P. 249, P. 256, P. 338, P. 358, P. 394, P. 419, P. 468, P. 495, P. 540, P. 541, P. 557, P. 564, P. 580, P. 602, P. 603, P. 659, P. 699, P. 734, P. 743, P. 744, P. 812, P. 814, P. 826, P. 915, P. 948, P. 954, P. 963, P. 972, P. 976, P. 982, P. 999, P. 1004, P. 1006, P. 1069, P. 1101, P. 1163, B. 27, B. 36, C. 29, C. 41, C. 49
True, Frederick W. (coauthor) ..... R. 6
Tunicata, northeastern coast ..... P. 76, P. 534
Turner, Lucien M ..... P. 279, P. 518, P. 736
[Turner, Lucien M.] ..... P. 561
Type specimens, concerning the lending of ..... C. 35

U.

Uhler, Philip R ..... P. 1108
Ulu, Eskimo woman's knife ..... R. 48
Unalashka. Fishes ..... P. 70
[Underwood, L. M.] ..... B. 46
Unionidæ, northeastern North America, distribution in ..... P. 952
Upper Cambrian fossils, new forms of.... P. 820

[1] See also under Directions for collecting, Preservation, and Preparation.

U. S. Eclipse Expedition, crustaceans collected by..... P. 949
insects, Arachnids and Myriapods collected by..... P. 951
mollusks collected by..... P. 940
U. S. Fish Commission, Annelids dredged by..... P. 594
birds collected by, Cozumel Island. P. 539
Brachyurans and Anomurans dredged by, 1880-82..... P. 343
Decapod crustaceans dredged by..... P. 455
Echini, Gulf of Mexico, obtained by..... P. 544
Echini taken by.. P. 491
fish-cultural exhibit of (London Fisheries Exhibition)..... B. 27
fishes collected by, 1888..... P. 723
fishes collected by P. 1115
fishes, deep-water, obtained by, in 1880..... P. 177
fishes from Atlantic and Gulf coasts obtained by..... P. 543
"Grampus," birds observed by, 1887 P. 819
marine invertebrates distributed by..... P. 82
medusæ collected by..... P. 528
new species of fishes collected by..... P. 429
Penæidæ, from dredgings of the P. 507
Plectromus crassiceps taken by.. P. 486
Utah. Fossils..... P. 137
Utah Lake. Fishes..... P. 175, P. 186
Utilla Island. Reptiles..... P. 1217

V.

Vancouver's Island. Fishes..... P. 298
Vasey, George..... P. 620, P. 725, P. 772
Vasey, George (coauthor)..... P. 749, P. 801
Vaughan, T. Wayland..... P. 1194
Vegetable textile fibers, microscopical mounts of..... R. 14
Venezuela. Birds..... P. 555, P. 619, P. 1093
Verrill, A. E. P. 76, P. 168, P. 169, P. 284, P. 534, P. 1000
Verrill, A. E. (coauthor)..... P. 1139
Violaceæ, North American, relating to distribution of..... C. 49
Virgin Islands, botany of the..... B. 13
Virginia. Amphiuma: "Congo snake".. P. 1150
Batrachian..... P. 1150
Early iron manufacture in.... P. 489
Fishes, Cape Charles City..... P. 843
Mammals..... P. 358
Myriapods..... P. 181
Vorticella, chlorophylloid granules of... P. 398

W.

Wabash Valley. Botany..... P. 1010
Wakasa lacquer-ware, manufacture of... P. 745
Walcott, Charles D..... R. 109, P. 738, P. 739, P. 746, P. 763, P. 775, P. 820, P. 1002, P. 1086, P. 1120, P. 1152, P. 1229
[Walcott, Charles D. Published writings (prior to 1885) on fossil invertebrates]..... B. 30
Walker, S. T..... P. 349, P. 396
Wall-eyed pollack, note on..... P. 939
Ward, Lester F..... P. 232, P. 680, P. 1141, B. 22
Washington and vicinity, flora of..... B. 22
Washington Territory. Fishes..... P. 112, P. 144, P. 265, P. 286, P. 388
Water from Gulf of Mexico, report on contents of..... P. 222
Watkins, J. Elfreth..... R. 41, R. 53, C. 38
Wead, Charles Kasson..... R. 119
Weapons and wings of birds..... R. 78
Webb, De Witt..... P. 966
Webster, H. E..... B. 25 (VII)
Weed, Clarence M..... P. 950
Wells, John Grant..... P. 596
[Wermeh, Dr., experiments on bacteria by]..... P. 218
West India region. Hermit crabs..... P. 1236
West Indian seal (Monachus tropicalis).. R. 6
West Indies. Birds..... P. 19, P. 103, P. 142, P. 166, P. 216, P. 260, P. 311, P. 420, P. 446, P. 545
Crustaceans..... P. 1104
Fishes, list of..... P. 595
Leptonacea of, recent and tertiary..... P. 1177
Mammals..... P. 468
Mollusks..... P. 1011
West Virginia. Ethnology..... R. 113
West Virginia. Mammals..... P. 44
Whale fishery and its appliances (London Fisheries Exhibition)..... B. 27
(See also under Mammals.)
White, Charles A..... R. 64, P. 86 P. 91, P. 92, P. 93, P. 113, P. 114, P. 115, P. 116, P. 131, P. 137, P. 207, P. 266, P. 267, P. 366, P. 793, P. 995
supplement to catalogue of writings of..... P. 1135
the published writings of..... B. 30
Williamson, M. Burton..... P. 898
Willis, Merritt..... P. 351
Williston, Samuel W..... B. 31
Wilmot, Samuel..... P. 43
Wilson, Thomas..... R. 29, R. 30, R. 31, R. 54, R. 68, R. 85, R. 88, R. 96, R. 98, R. 108, P. 777, C. 40, C. 42

Winslow, Francis ..... B. 27
Wolpai, a maid of ..... P. 889
Wooden statue of Baron Ii Kamon-no-Kami Naosuké ..... R. 86
Wood-rats, diagnosis of ..... P. 1006
Worcester, Dean C. (coauthor) ..... P. 1134
World's Columbian Exposition, draft of system of classification for the ..... R. 62
World's Columbian Exposition, participation of the Smithsonian Institution in the ..... R. 72
Worms. (See under Annelids and Parasitology.)
Wyoming. Fossils ..... P. 137

X.

[Xantus, John] ..... P. 290, P. 291

Y.

Yale College, fishes in museum of ..... P. 329
Yarrow, H. C. ..... P. 299, P. 359, B. 24
Yezo. Ainos of ..... R. 50
Ancient pit-dwellers of ..... R. 49
Birds collected in ..... P. 904
Gray shrike, on status of ..... P. 931
Yucatan. Birds ..... P. 476, P. 588

Z.

Zeledon, José C. ..... P. 499
[Zeledon, José C.] ..... P. 605
Zeuglodon, pelvic girdle of ..... P. 1211
Zoological position of Texas ..... B. 17

O

SMITHSONIAN INSTITUTION LIBRARIES
3 9088 01421 0959